

FIG. 1

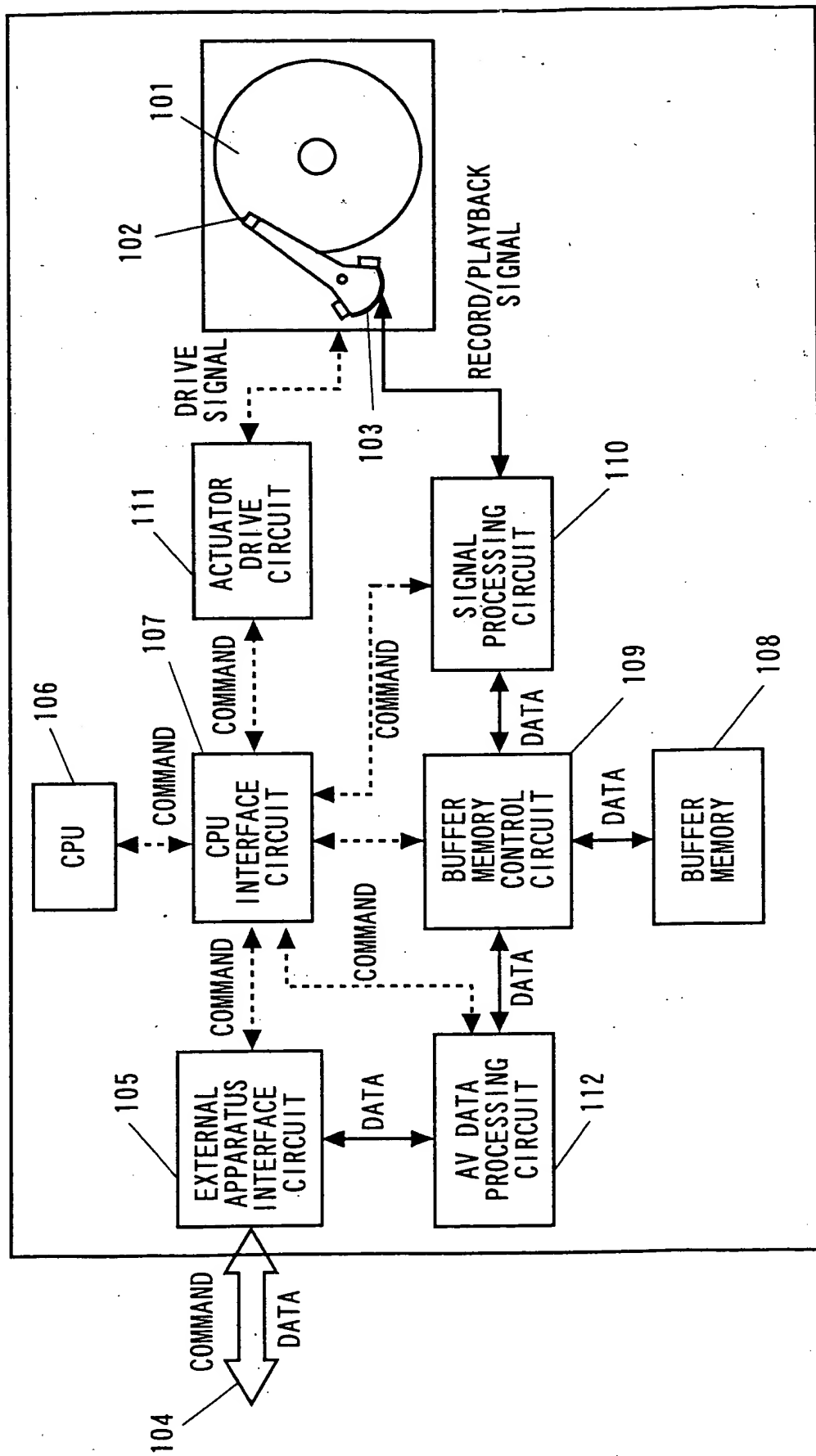


FIG. 2

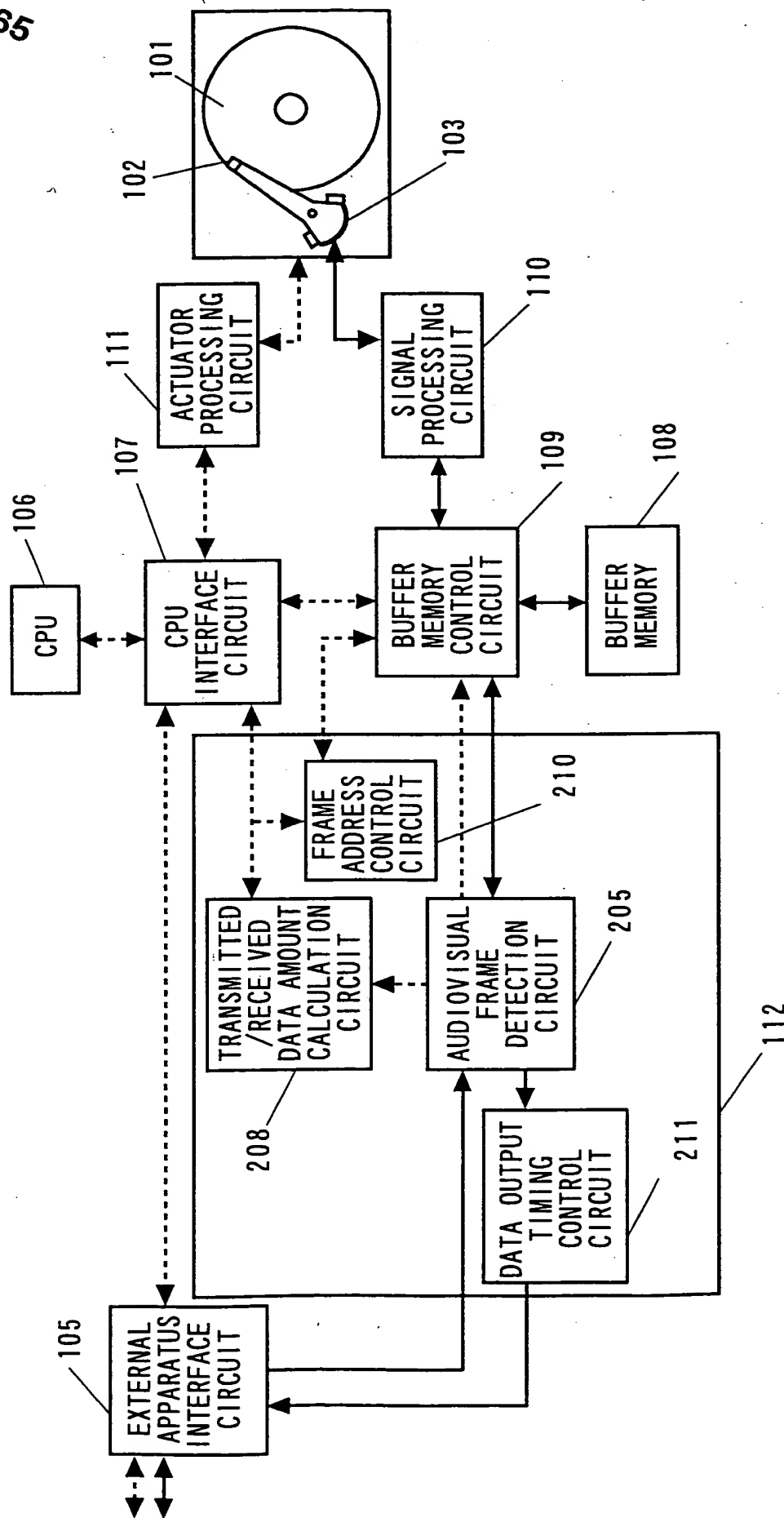


FIG. 3

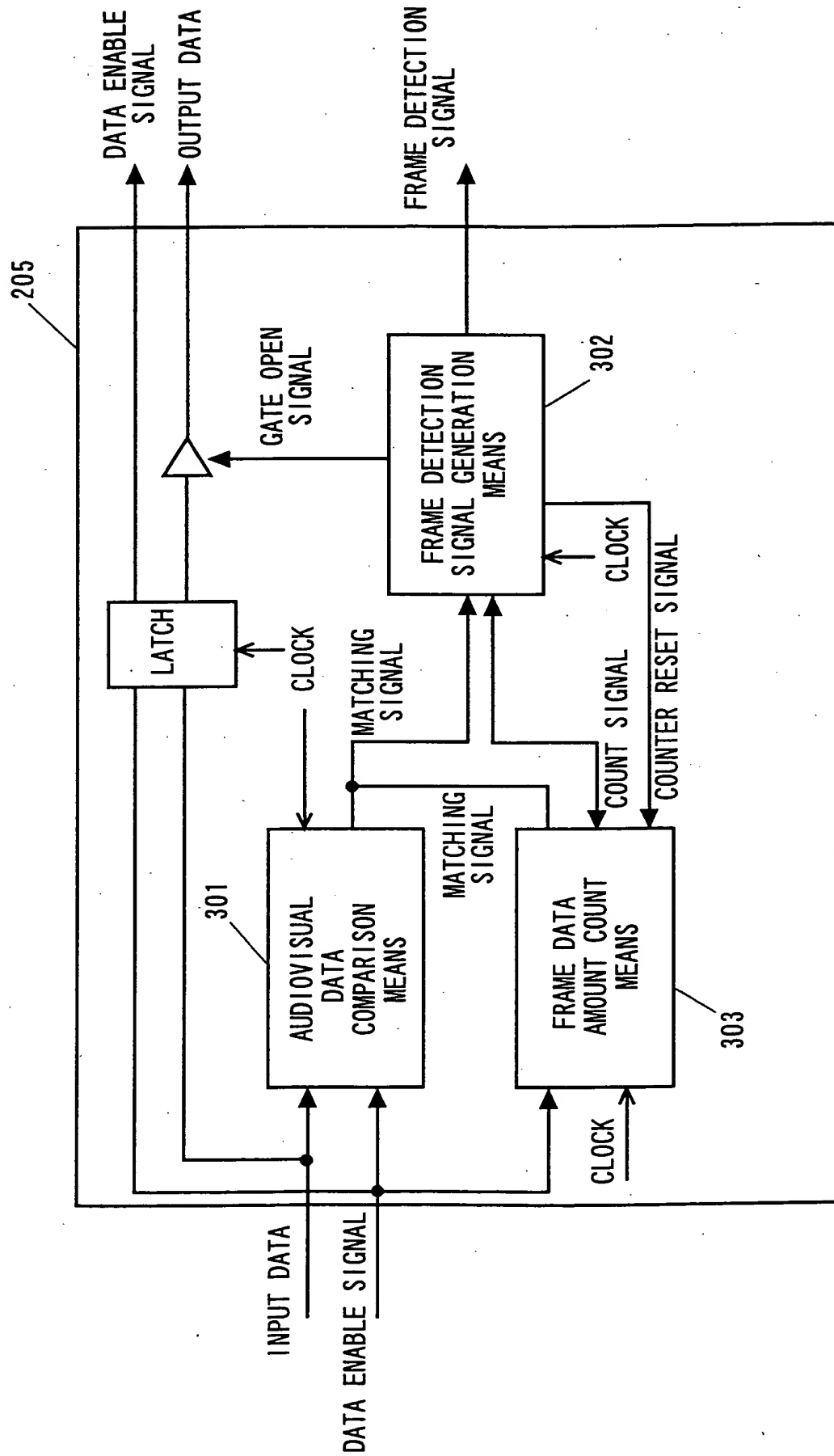
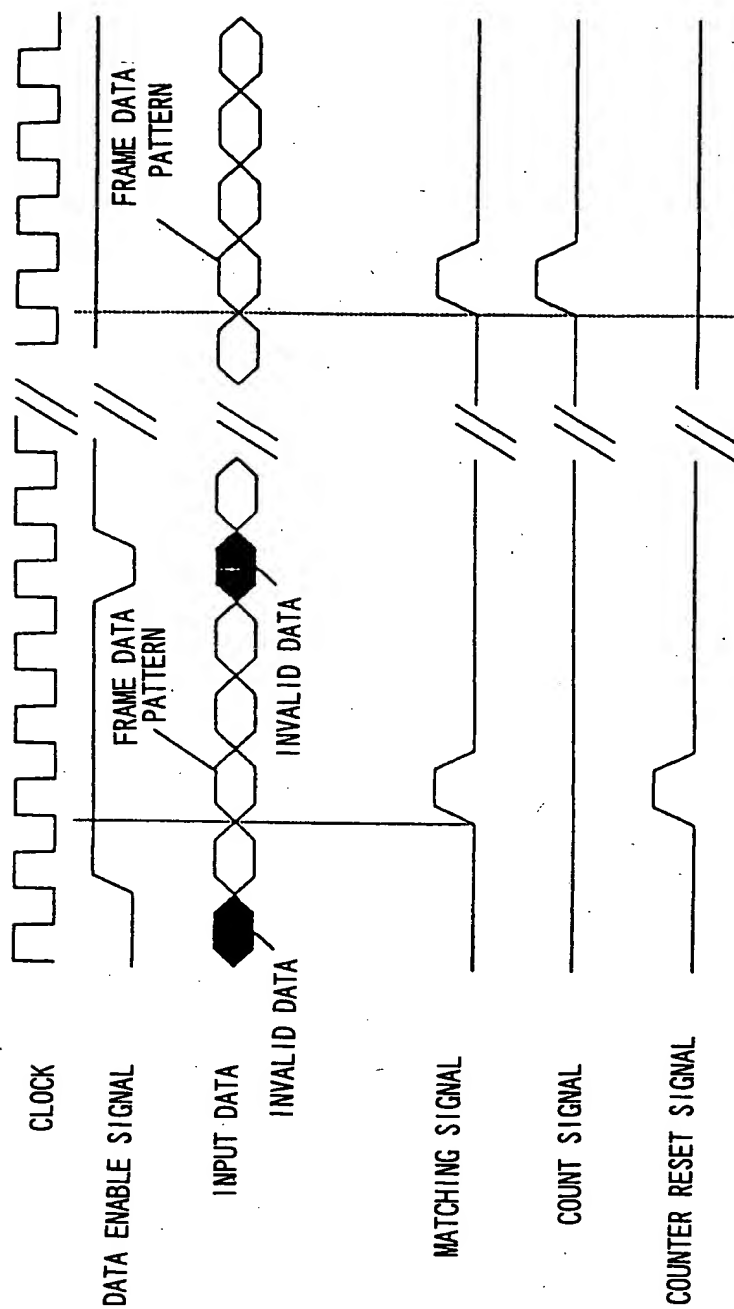


FIG. 4



TIMING SPECIFICATIONS

FIG. 5

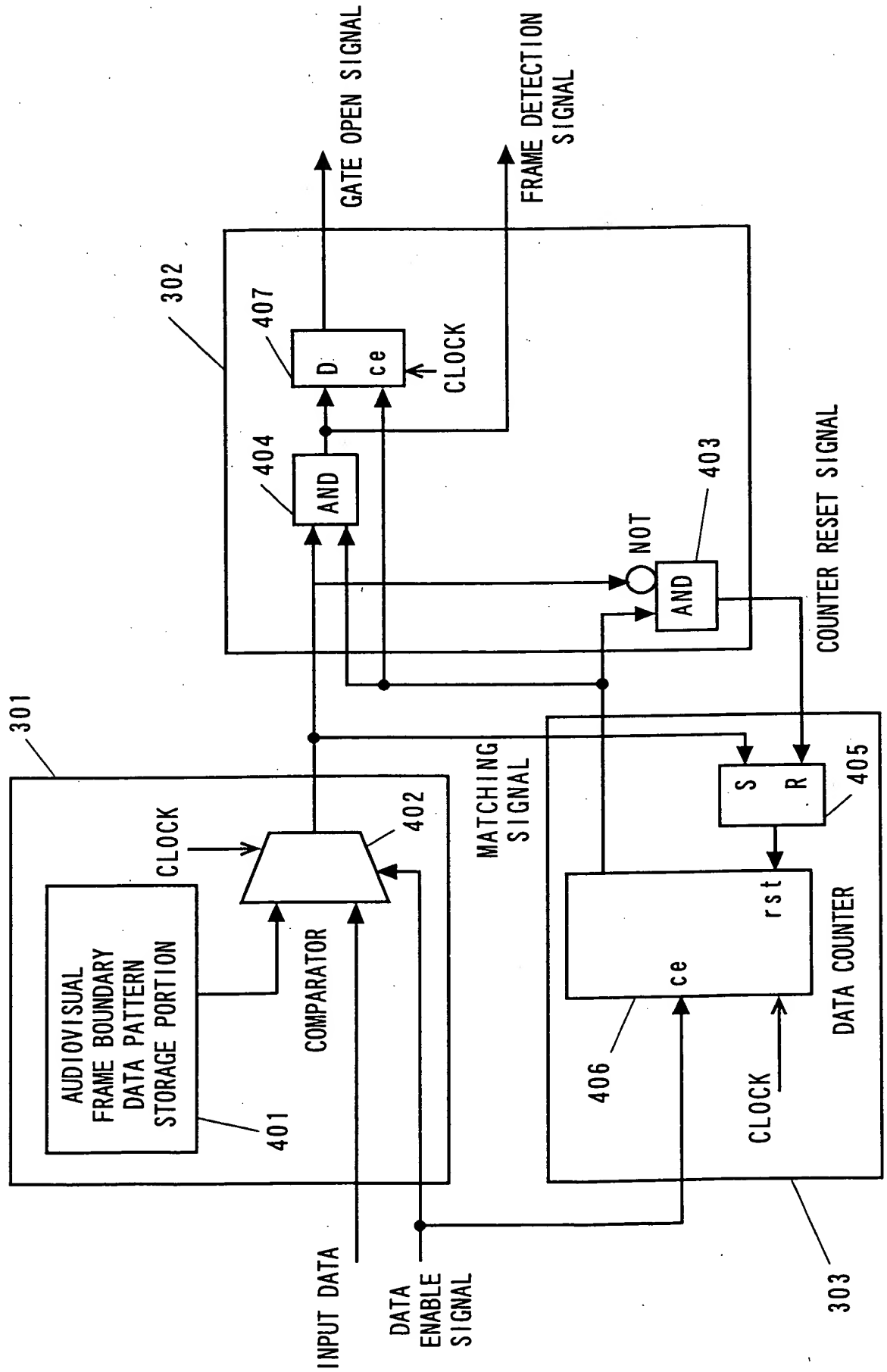


FIG. 6

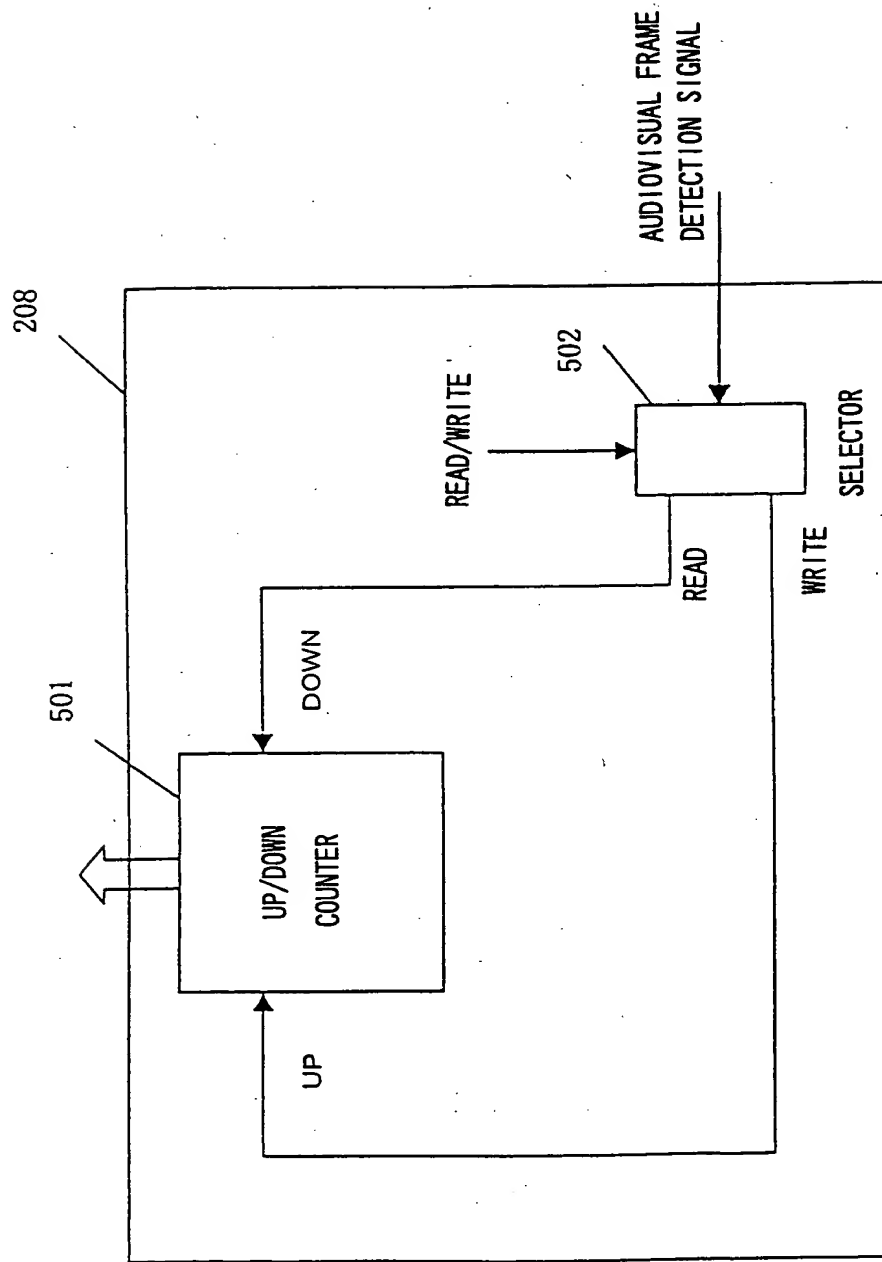
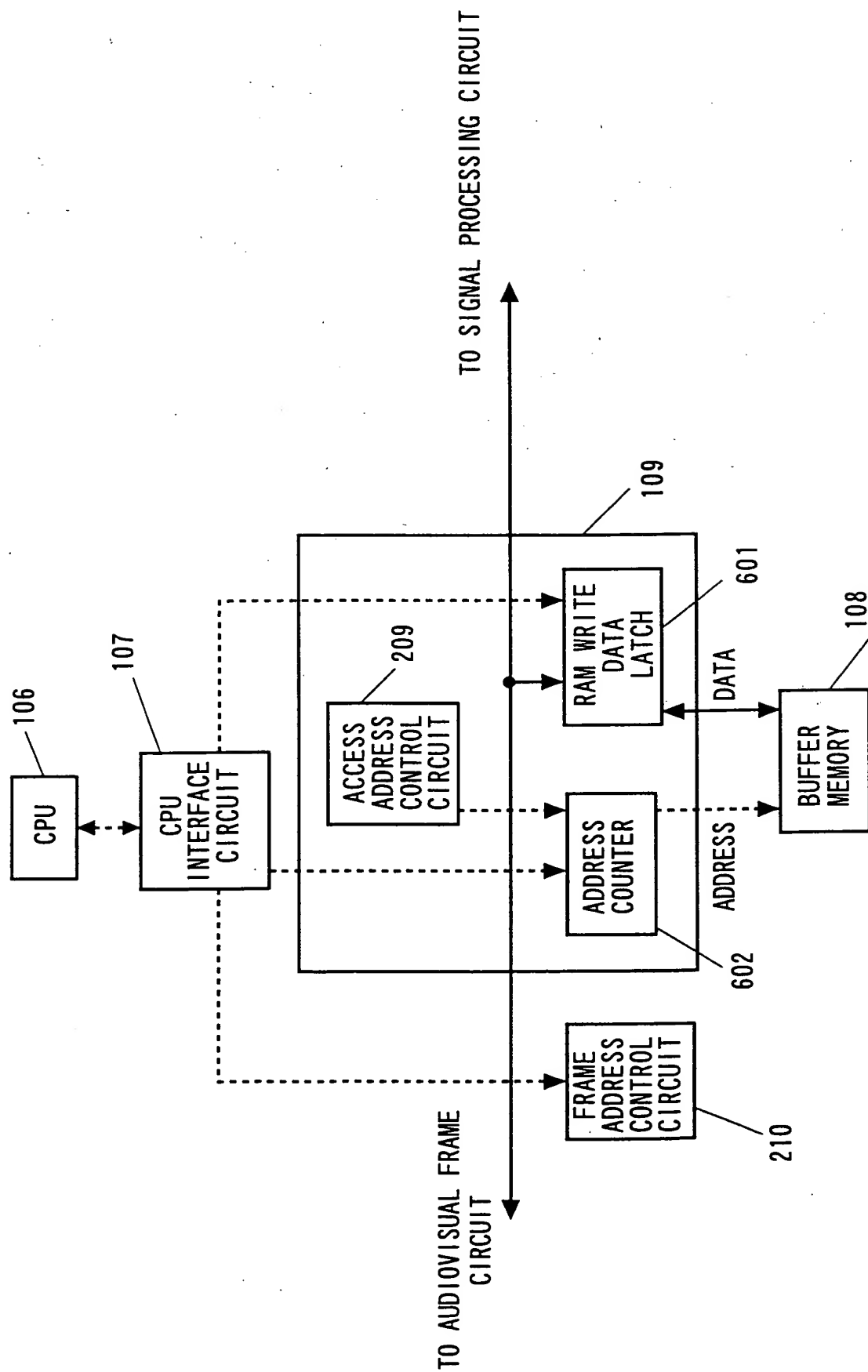


FIG. 7



603

ADDRESS COUNTER

FRAME ADDRESS STORAGE SIGNAL

FIRST FRAME ADDRESS STORAGE PORTION (FIRST STAGE)

SECOND FRAME ADDRESS STORAGE PORTION (SECOND STAGE)

FRAME ADDRESS A

FRAME ADDRESS B

CLOCK LINE IS OMITTED.

CLOCK LINE IS OMITTED.

୧୫୫

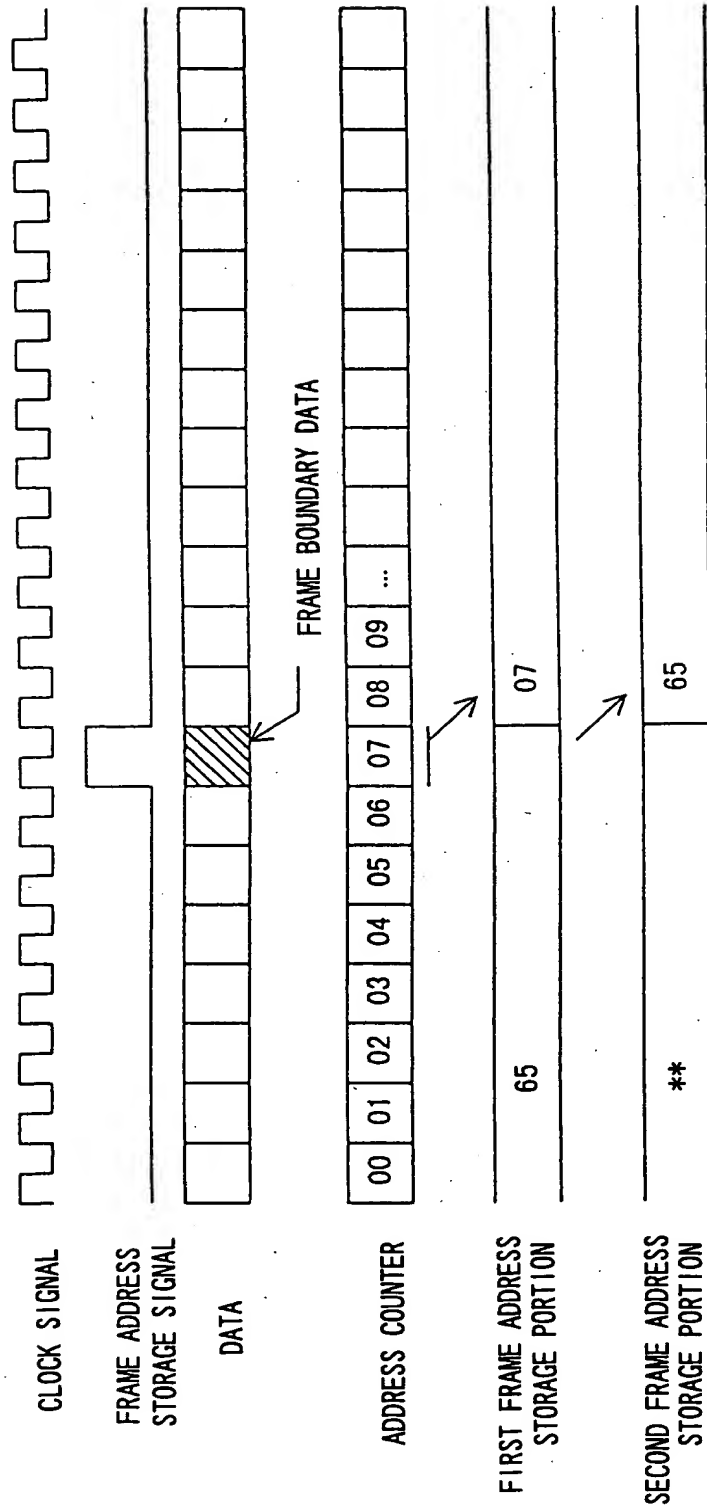
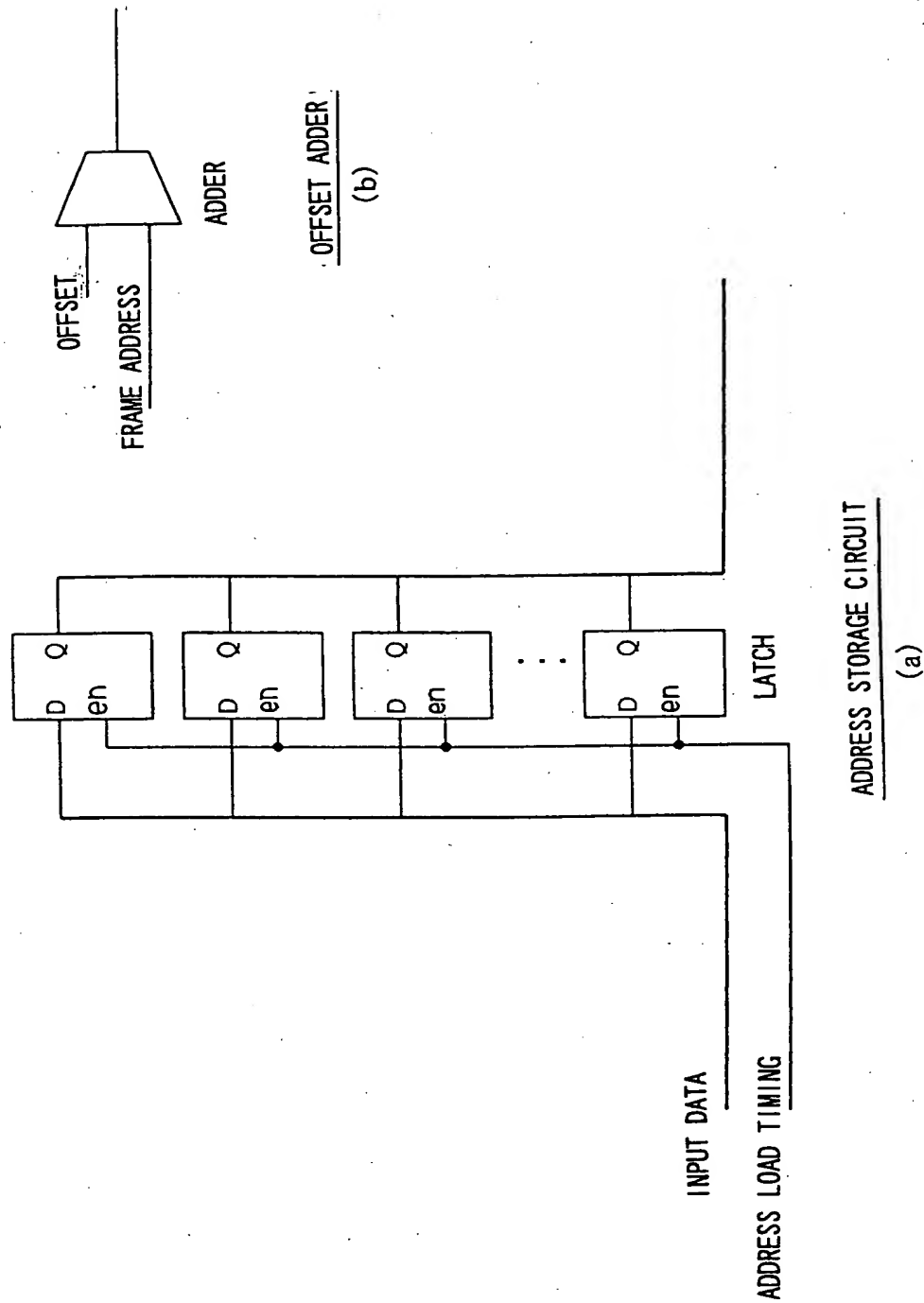


FIG. 11



09/485881

FIG. 12

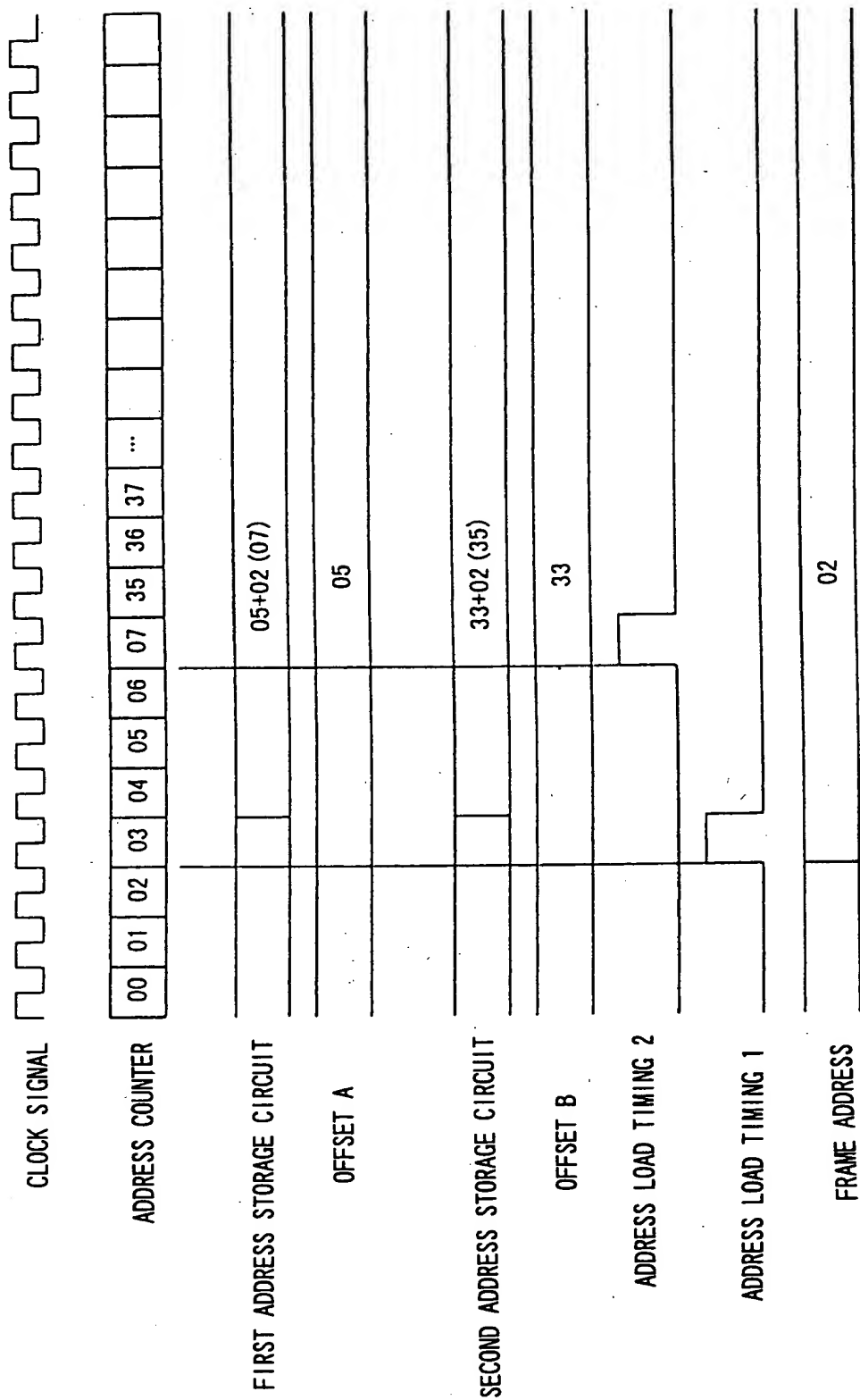


FIG. 13

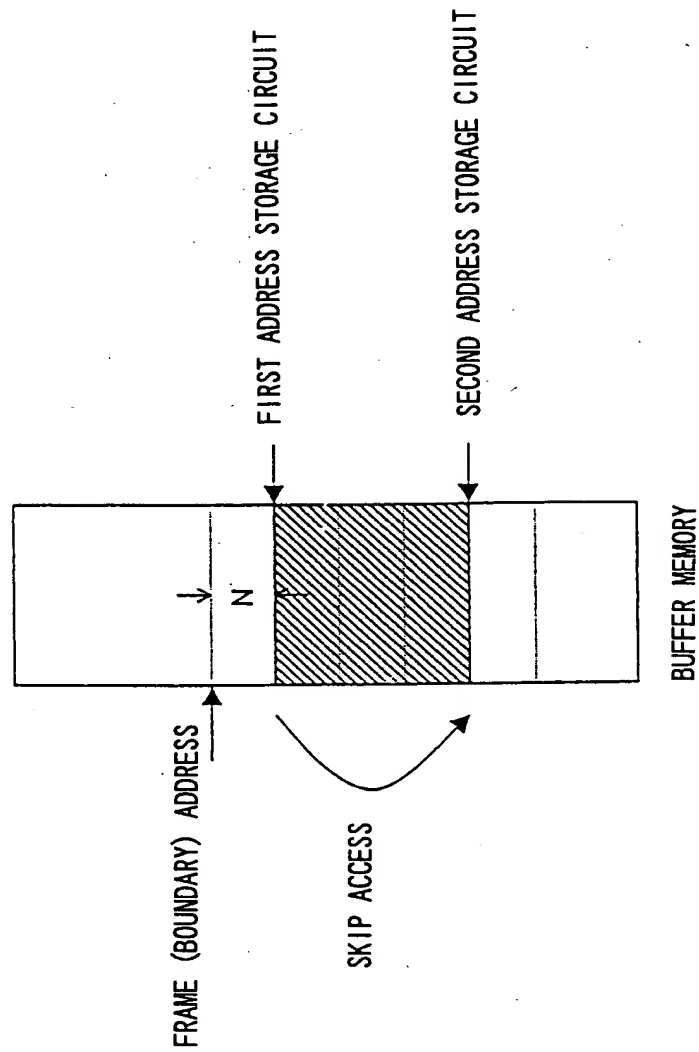


FIG. 14

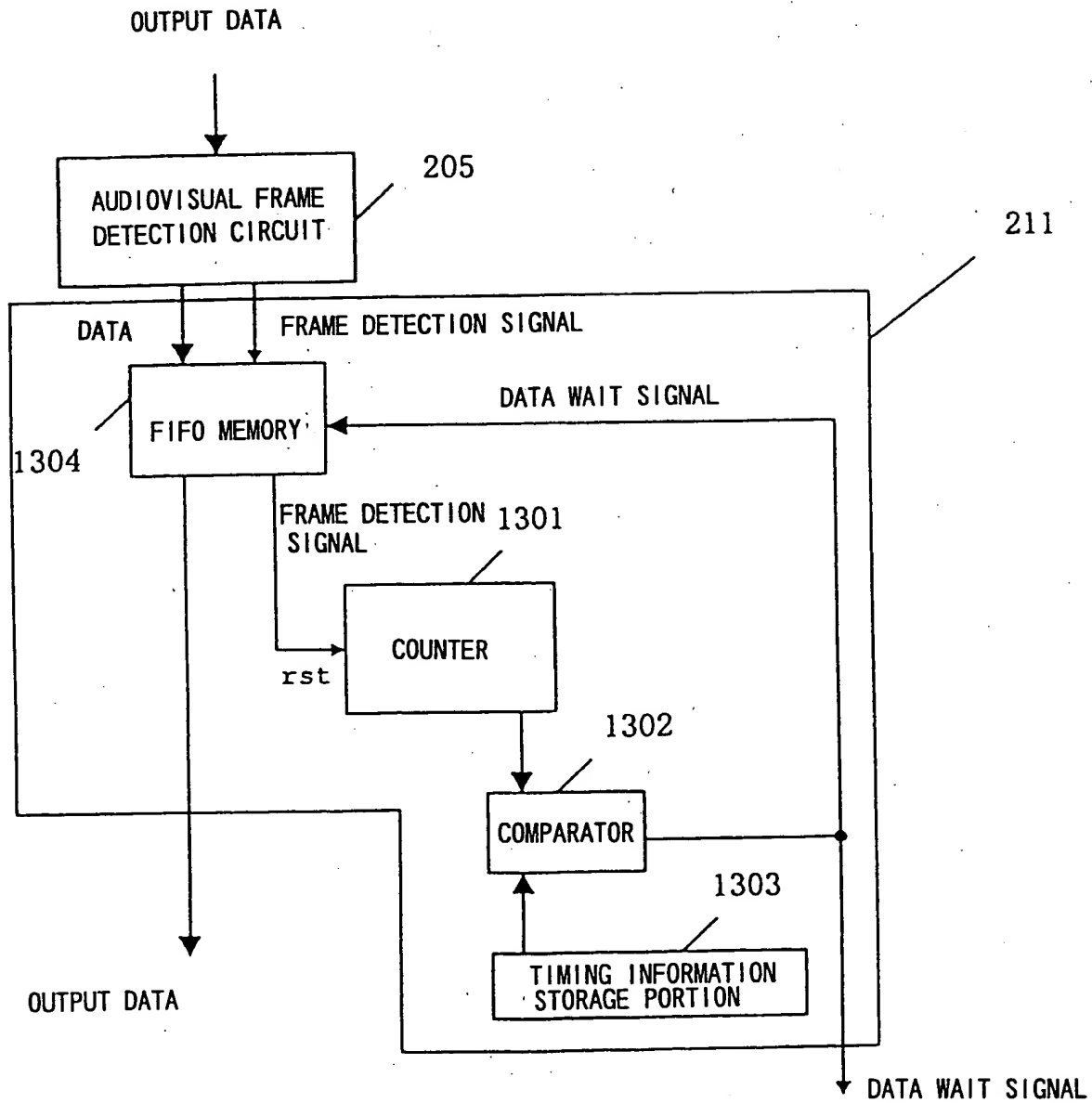
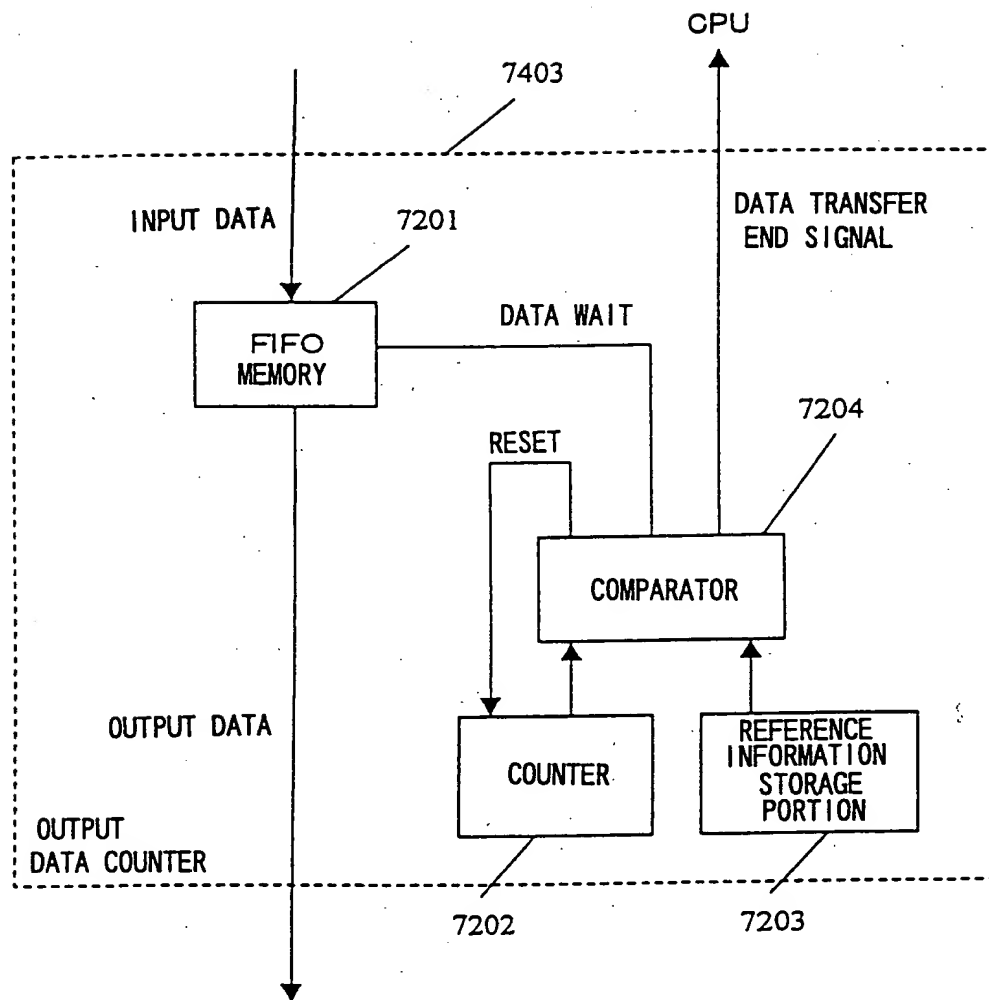


FIG. 17



The diagram illustrates a frame structure for recorded audiovisual data. It is a horizontal bar divided into several segments. From left to right: a small segment labeled 'a' with a triangle pointing right; a larger segment labeled 'c' with a triangle pointing right; a segment labeled 'd' with a triangle pointing right; a segment labeled 'e' with a triangle pointing right; and a final segment labeled 'b' with a triangle pointing right. A bracket above the segments from 'a' to 'd' is labeled 'RECORDED AUDIOVISUAL DATA'. A bracket above the segments from 'e' to 'b' is labeled 'UNRECORDED AREA'. A lightning bolt symbol is placed between segments 'c' and 'd'. Labels on the left side of the diagram include 'AREA INFORMATION OF RECORDED AUDIOVISUAL DATA' pointing to segment 'a', 'END AUDIOVISUAL FRAME DATA' pointing to the right edge of segment 'b', and 'SECOND AUDIOVISUAL FRAME DATA' pointing to segment 'c'. A label on the right side is 'HEAD AUDIOVISUAL FRAME DATA' pointing to segment 'a'.

- a. HEAD ADDRESS OF RECORDING AREA OF MAGNETIC DISK
- b. END ADDRESS OF RECORDING AREA OF MAGNETIC DISK
- c. RECORD START ADDRESS OF HEAD AUDIOVISUAL FRAME DATA
- d. RECORD START ADDRESS OF END AUDIOVISUAL FRAME DATA
- e. HEAD ADDRESS OF UNRECORDED AREA

Diagram illustrating a data structure 50, which is a horizontal bar divided into segments. The segments are labeled from left to right: a, b, c, d, e, and UNRECORDED AREA. The segments a, b, c, d, and e are grouped under a bracket labeled "RECORDED AUDIOVISUAL DATA". The segment UNRECORDED AREA is labeled "UNRECORDED AREA". The segments a, b, c, d, and e are marked with triangles at their boundaries. The segment UNRECORDED AREA is marked with a triangle at its right boundary. A lightning bolt symbol is shown between segments c and d, indicating a break or continuation of the structure.

FIG. 20

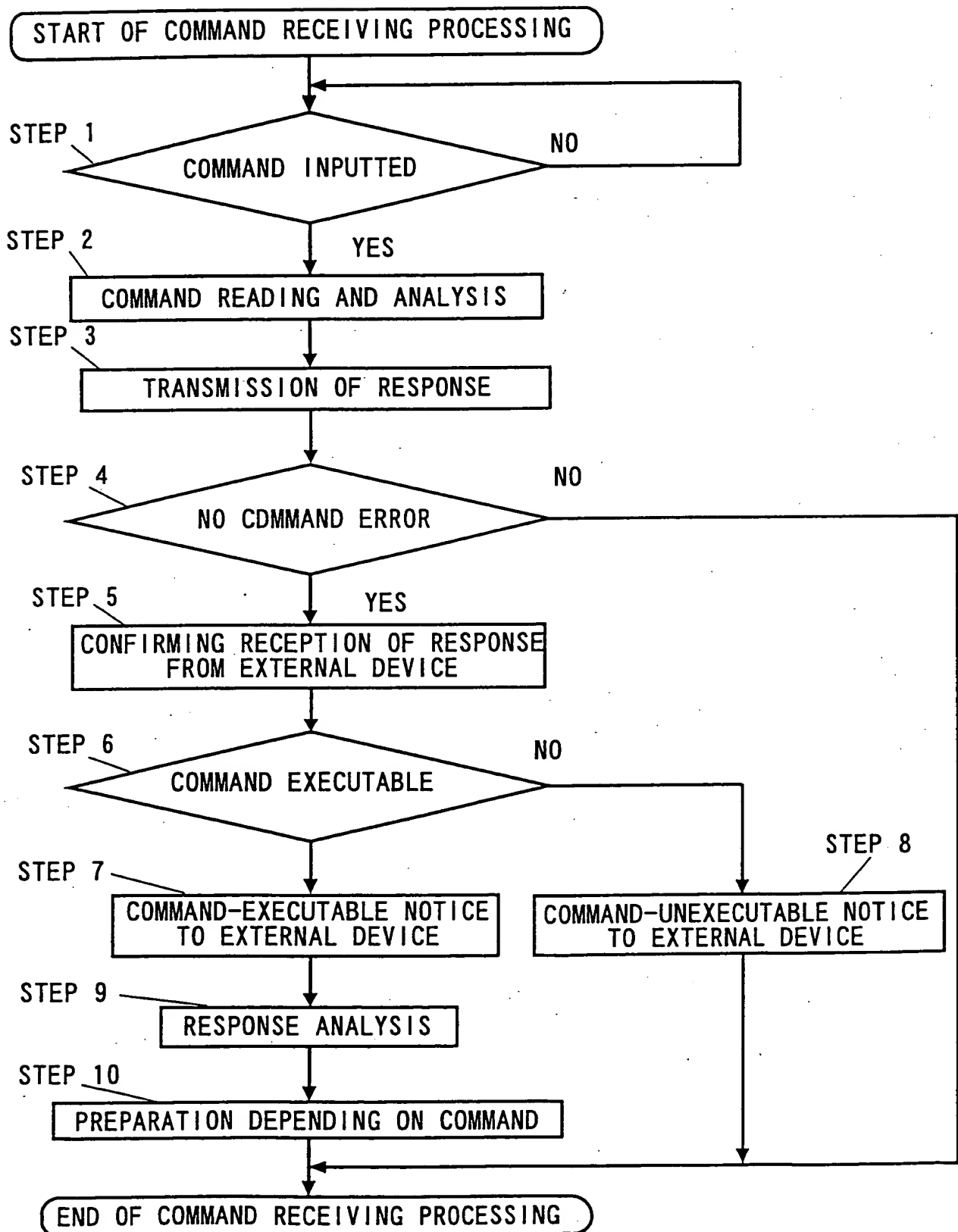


FIG. 21

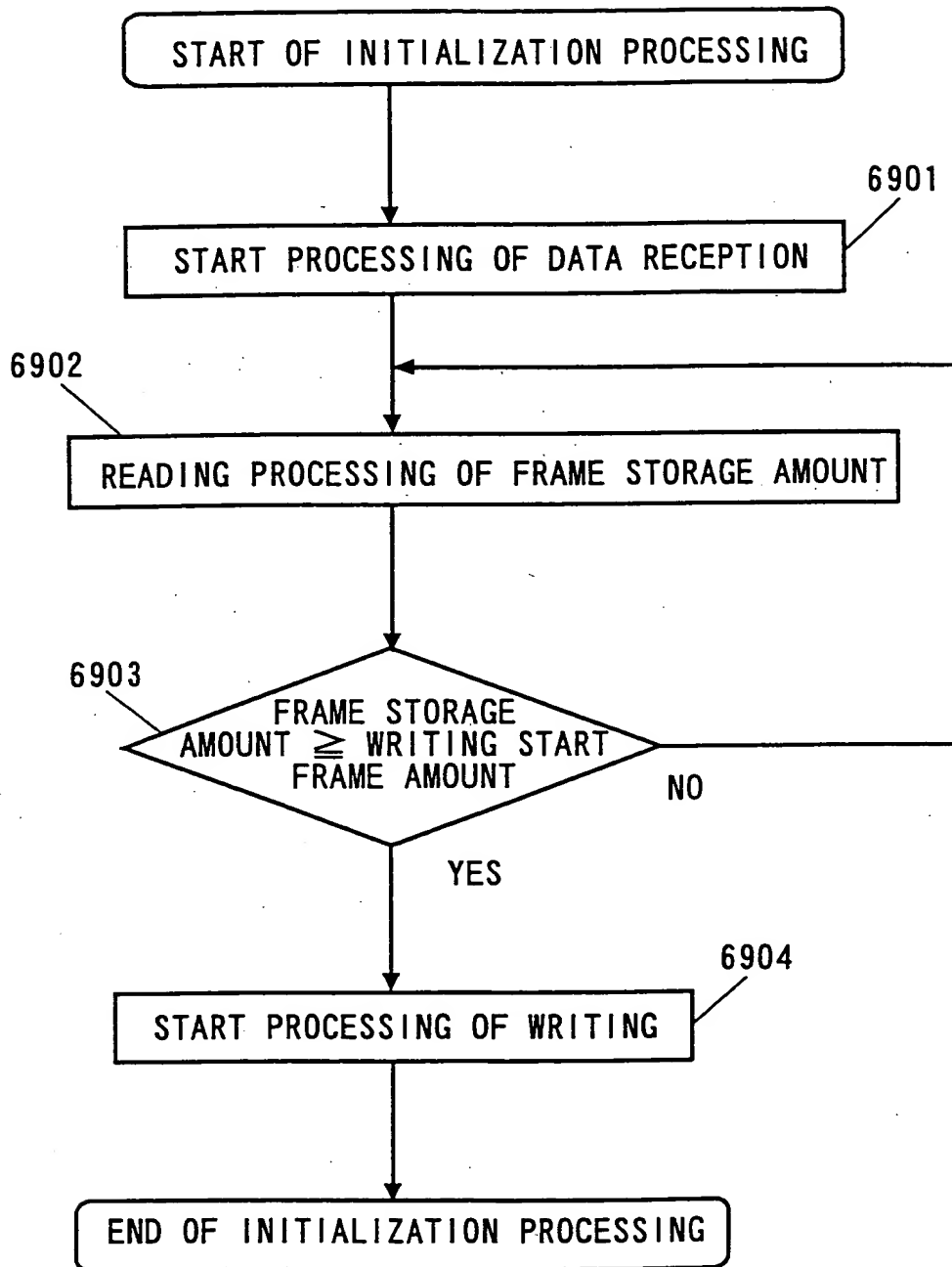


FIG. 22

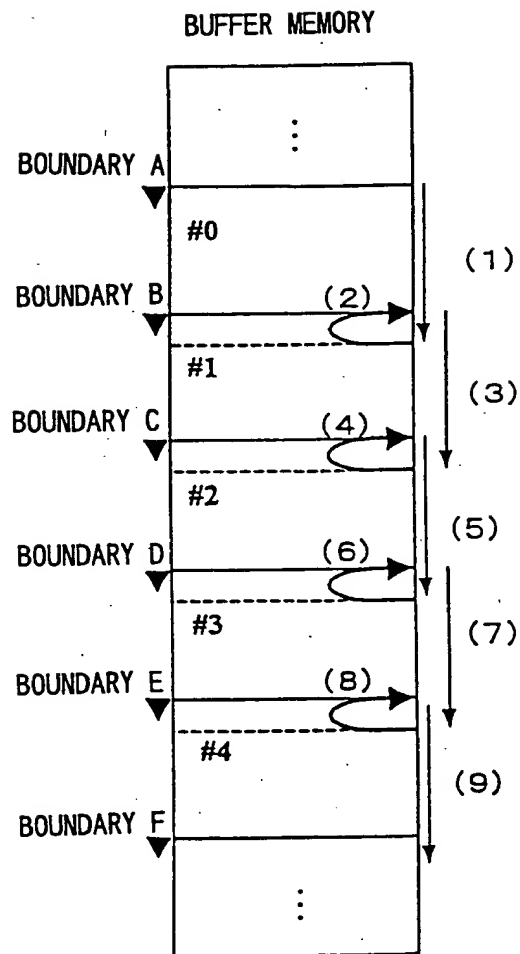


Diagram illustrating a frame structure. The frame is divided into two main sections: **RECORDED AUDIOVISUAL DATA** (left) and **UNRECORDED AREA** (right). The recorded section contains several data blocks, with a break indicated by a zigzag line. The unrecorded section is labeled **UNRECORDED AREA**. A label **50** points to a specific block in the recorded section. The frame is bounded by markers **a**, **b**, **c**, **d**, and **e**. A label **END AUDIOVISUAL FRAME DATA** points to the end of the recorded section.

FIG. 24

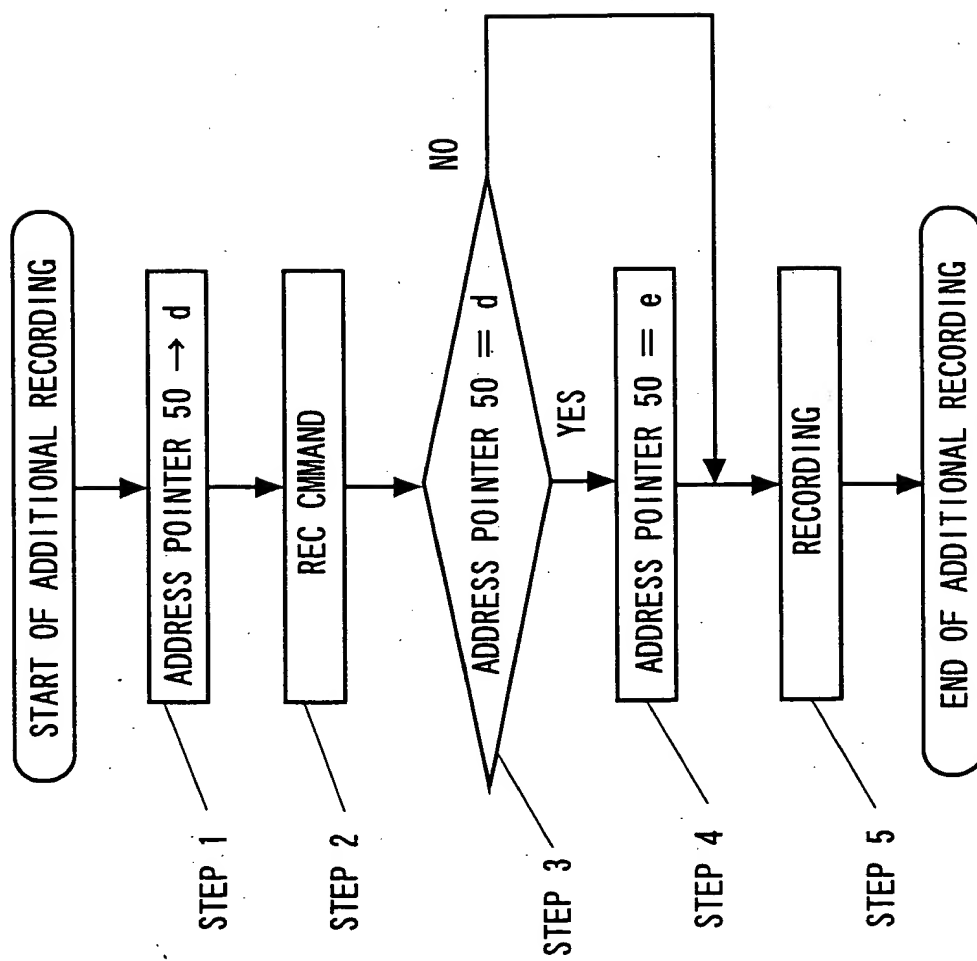


FIG. 25

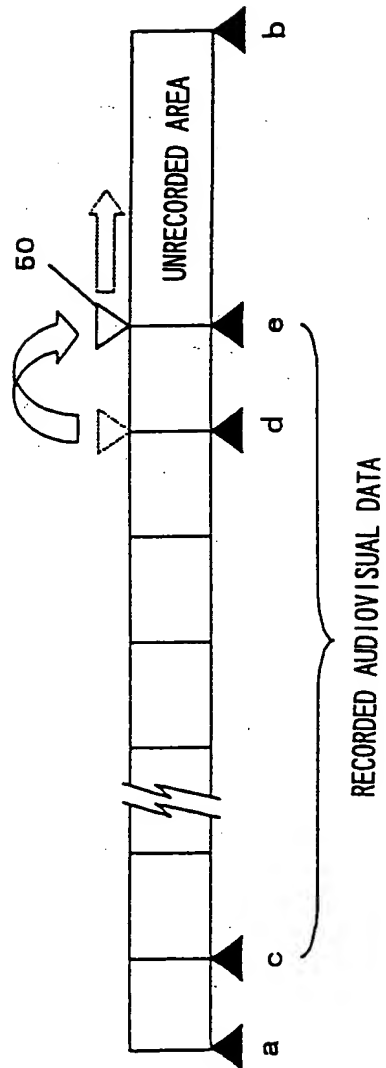


FIG. 26

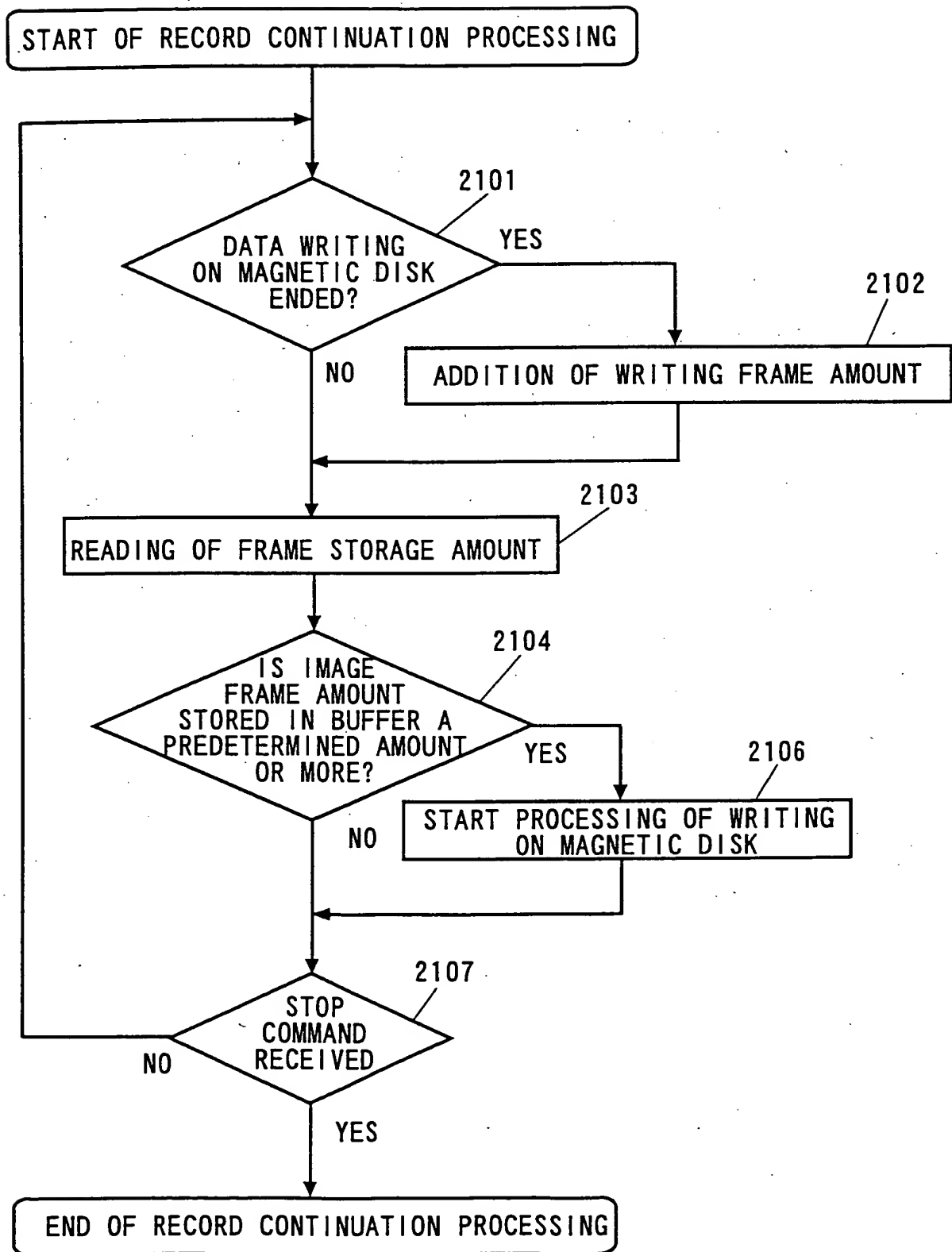
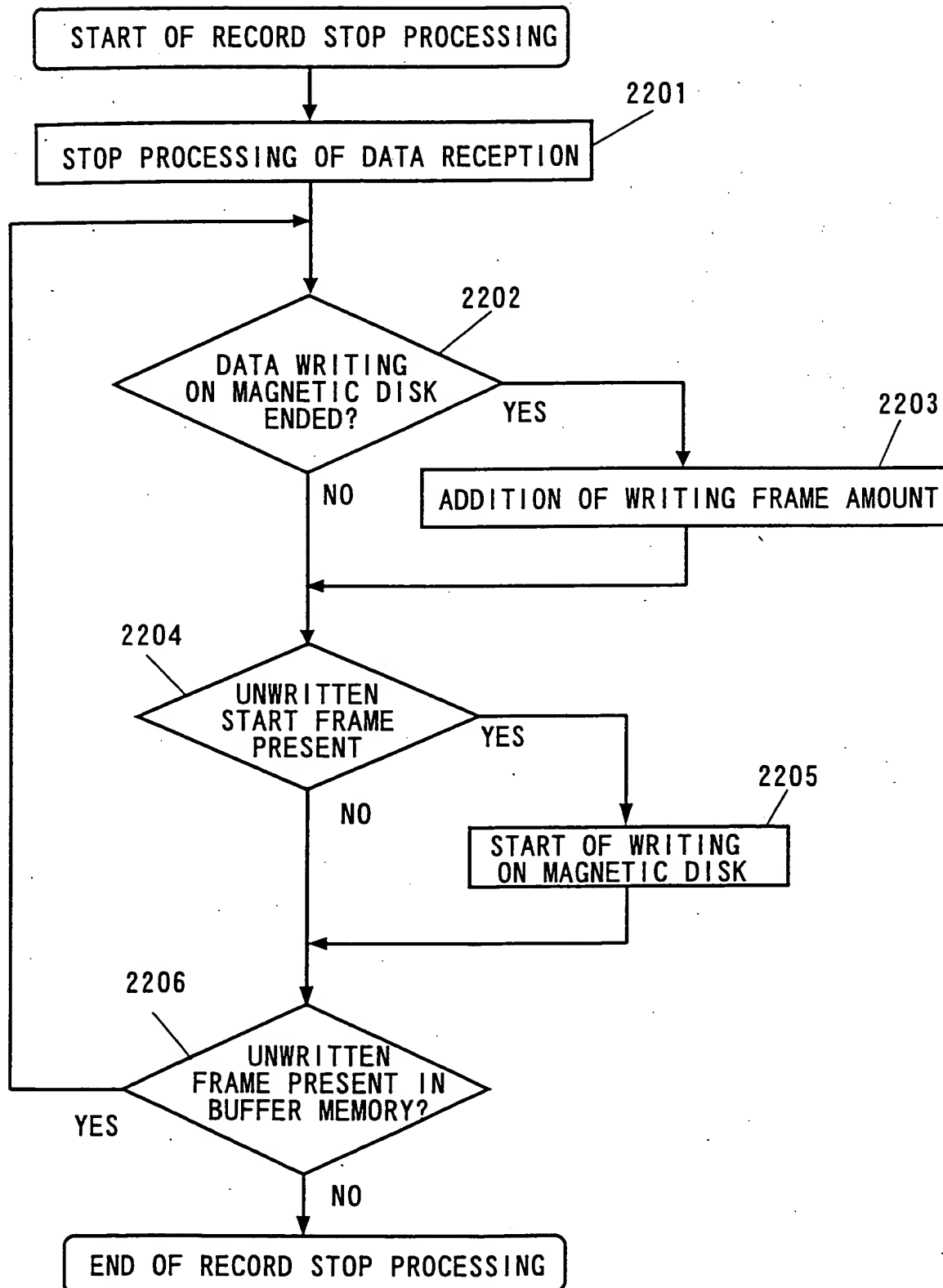


FIG. 27



RECORDED AUDIOVISUAL DATA NEWLY RECORDED AUDIOVISUAL DATA

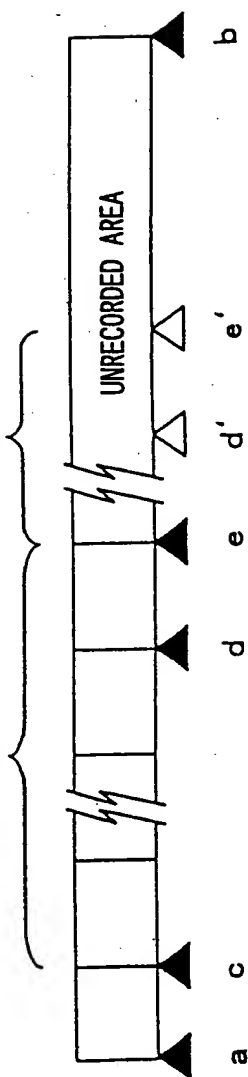
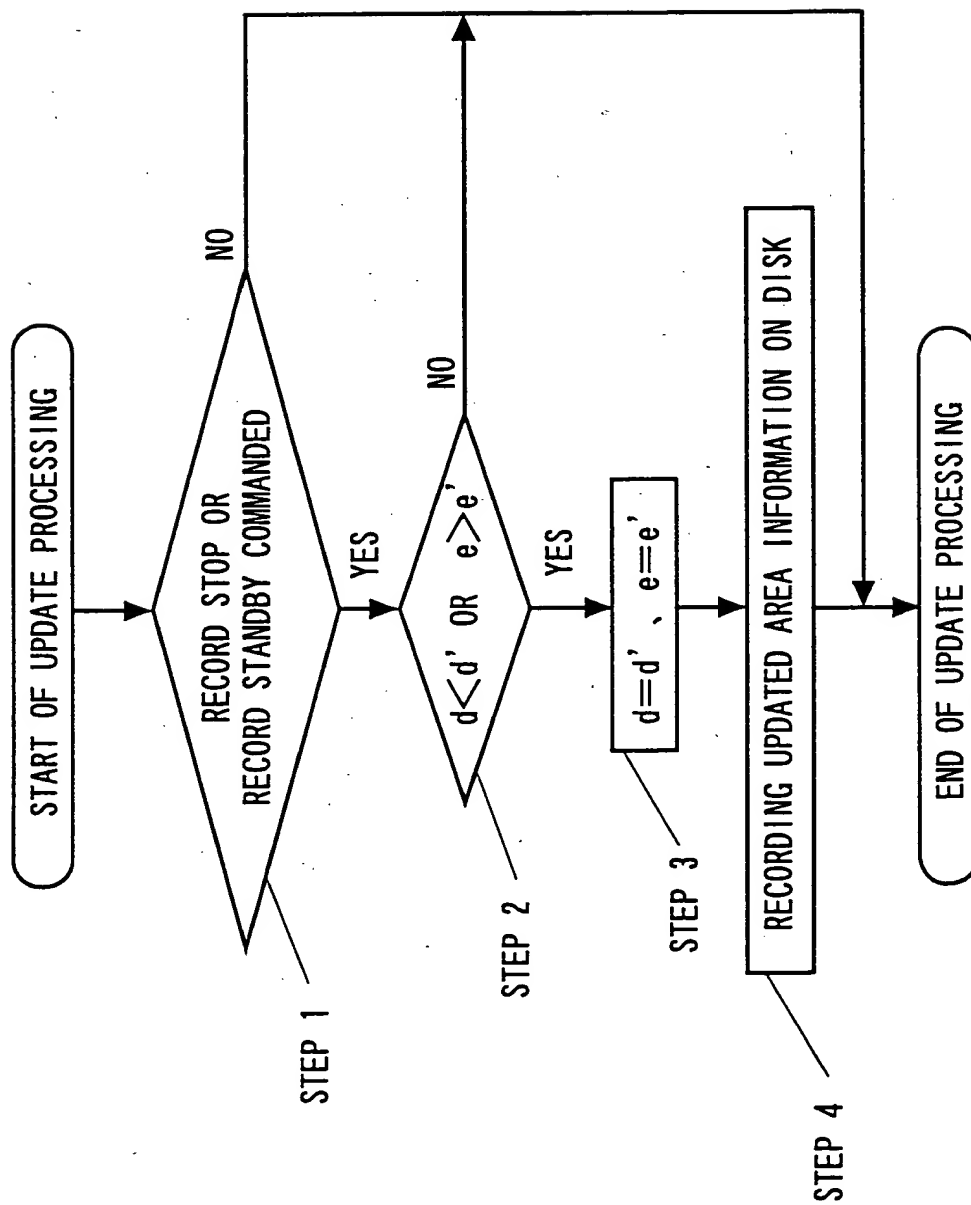


FIG. 29



RECORDED AUDIOVISUAL DATA

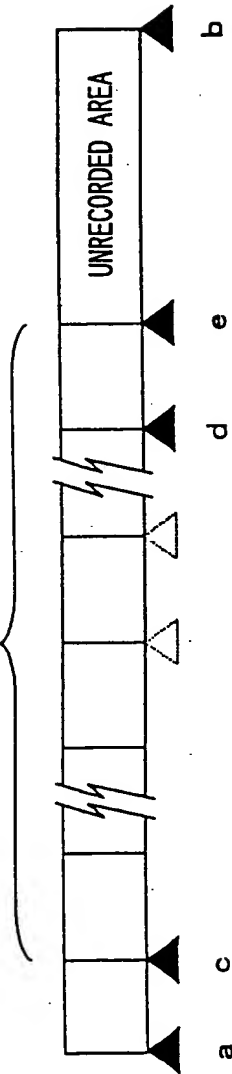


FIG. 31

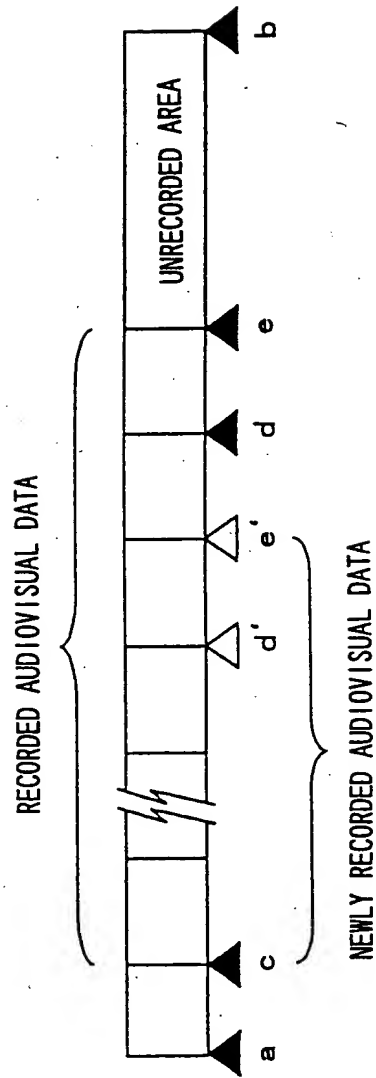


FIG. 32

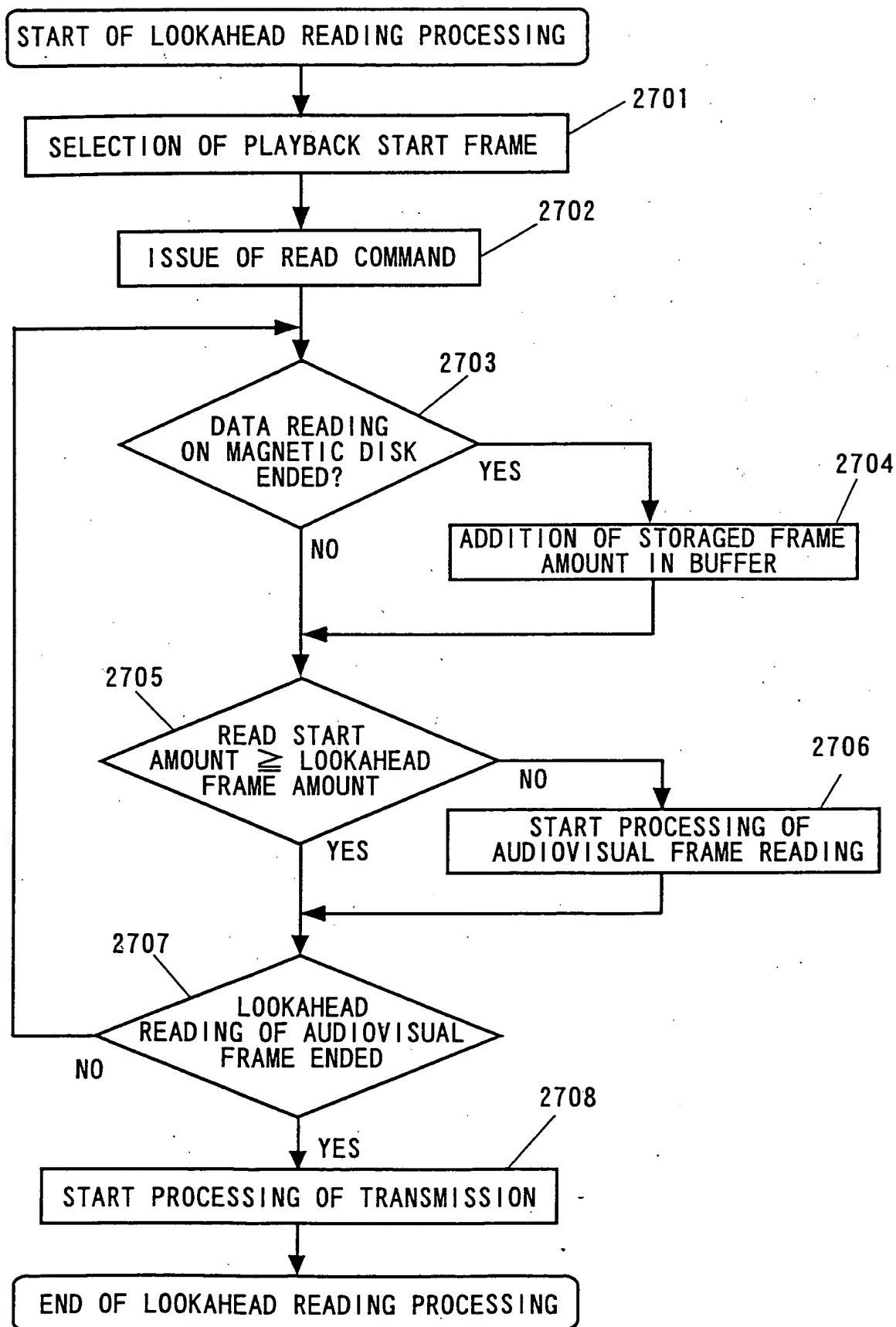


FIG. 33

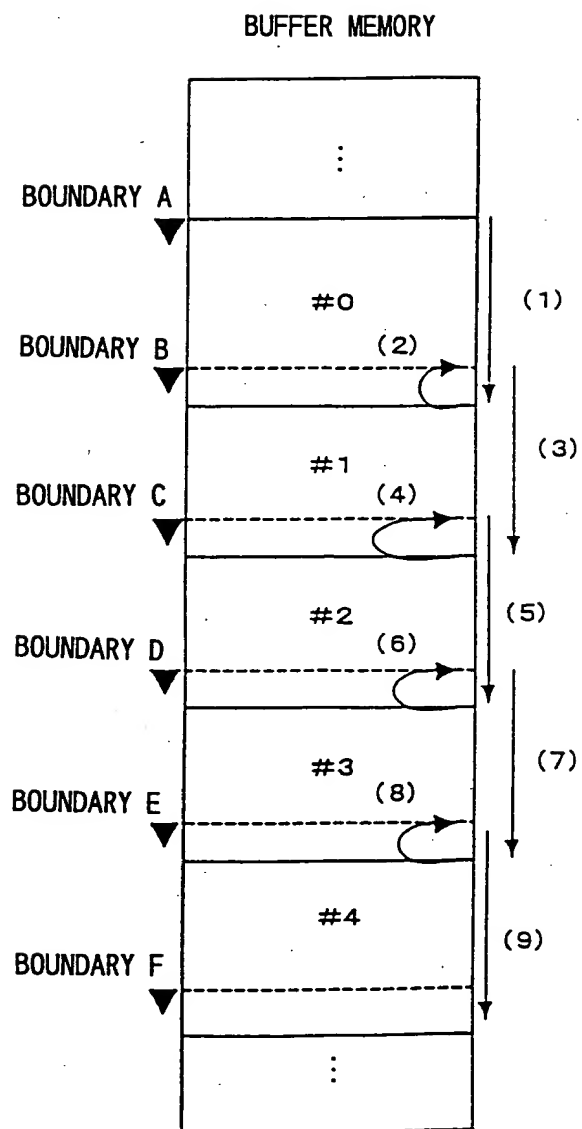


FIG. 34

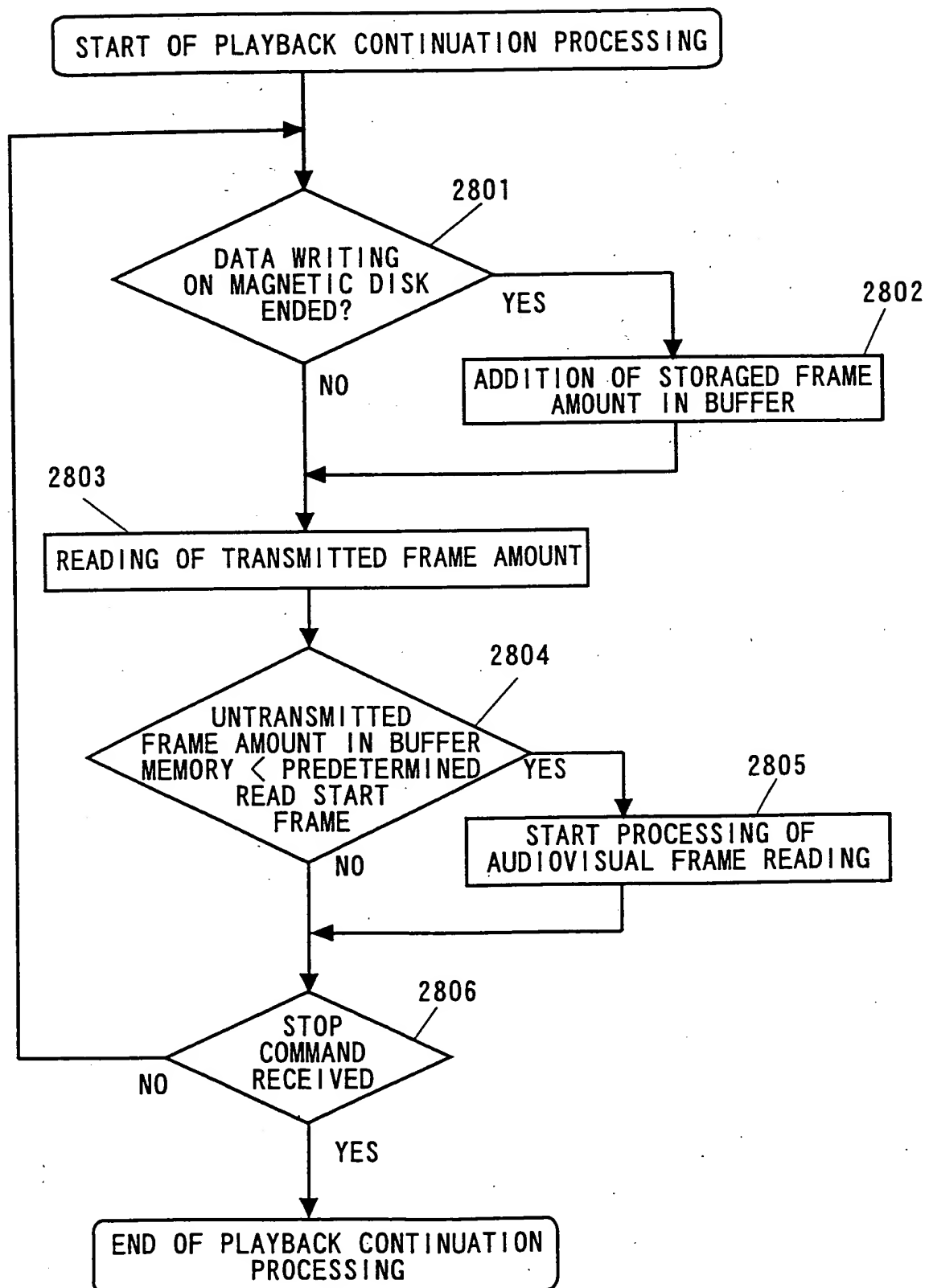
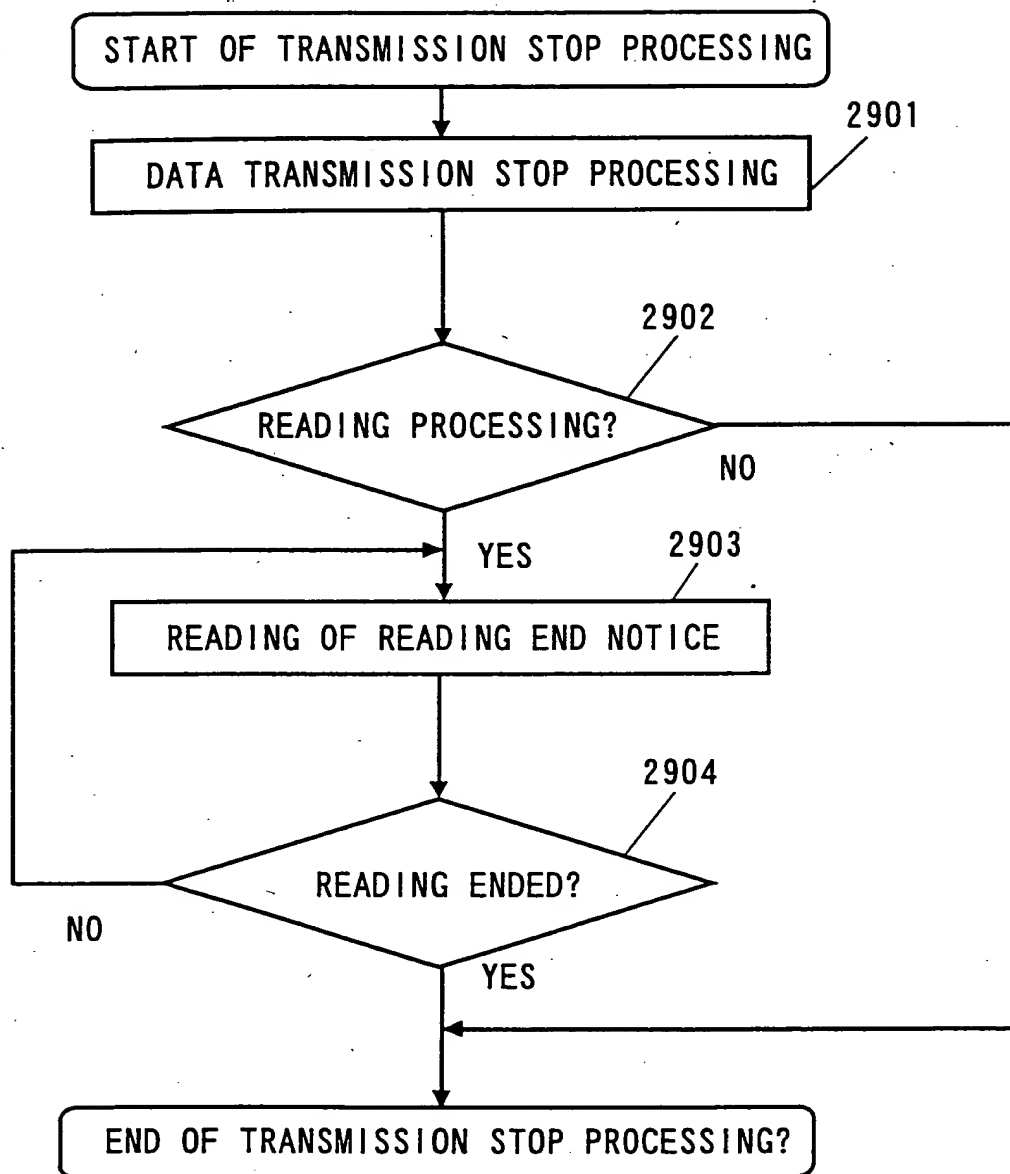


FIG. 3.5



OUTPUT SEQUENCE	BUFFER MEMORY	READING SEQUENCE
(1)	FRAME NUMBER #0	(1)
(2)	#1	(2)
(3)	#2	(3)
(4)	#3	(4)
(5)	#4	(5)
	⋮	

FIG. 37

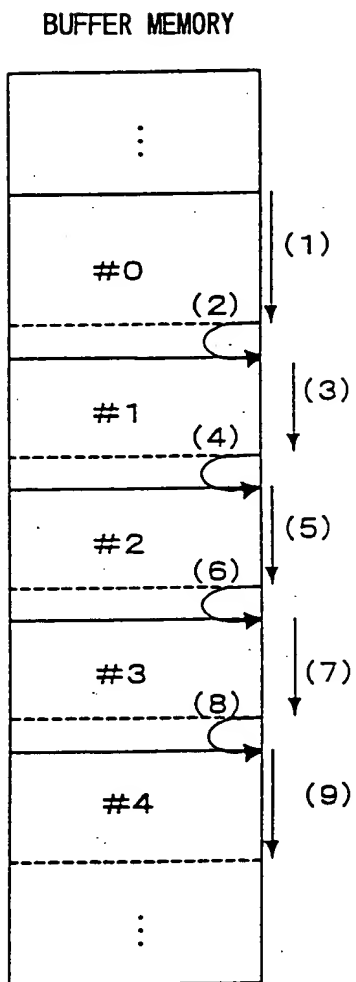


FIG. 38 FORWARD DIRECTION/HIGH-SPEED PLAYBACK

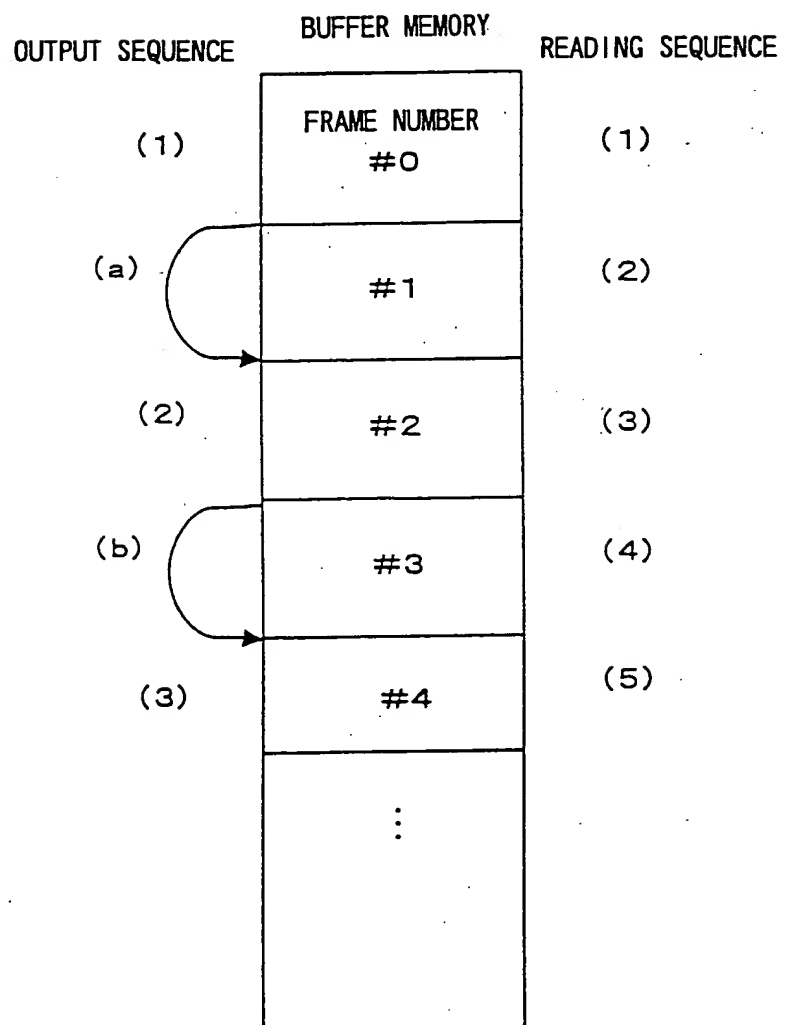


FIG. 39 FORWARD DIRECTION/HIGH-SPEED PLAYBACK

OUTPUT SEQUENCE	BUFFER MEMORY	READING SEQUENCE
(1)/(2)	FRAME NUMBER #n	(1)
(3)/(4)	#n+2m	(2)
(5)/(6)	#n+4m	(3)
(7)/(8)	#n+6m	(4)
(9)/(10)	#n+8m	(5)
	⋮	

000050 10058100

FIG. 40 REVERSE DIRECTION/NORMAL-SPEED PLAYBACK

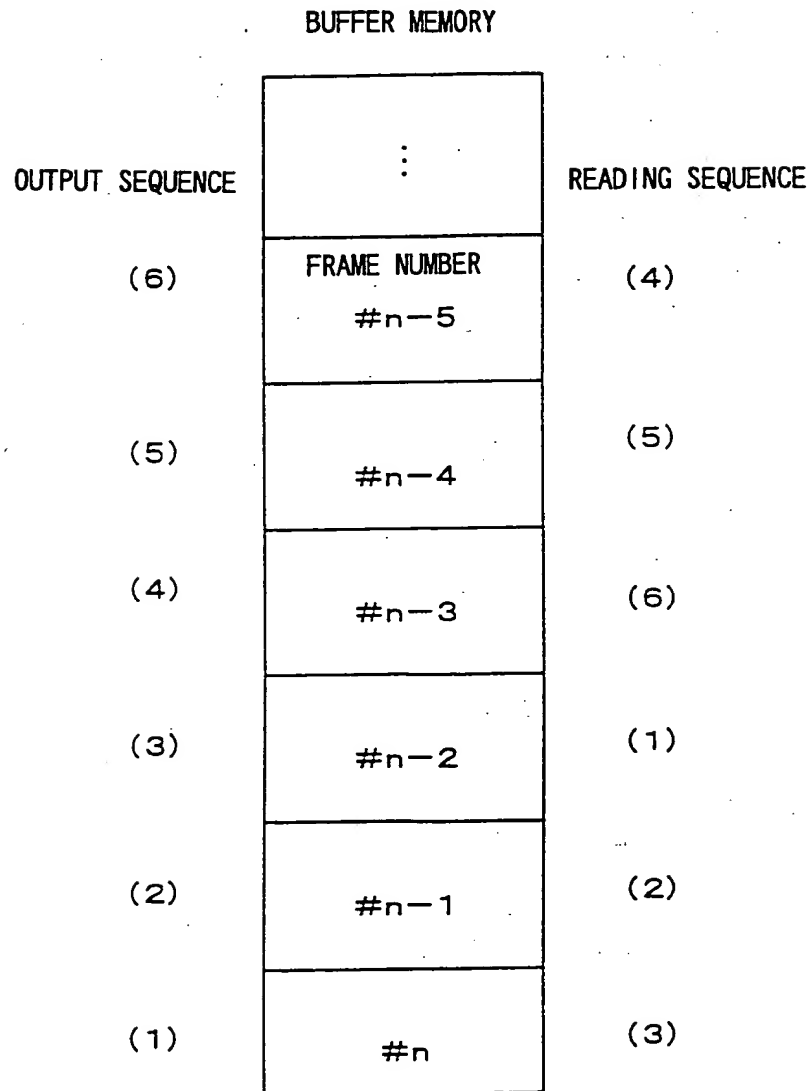
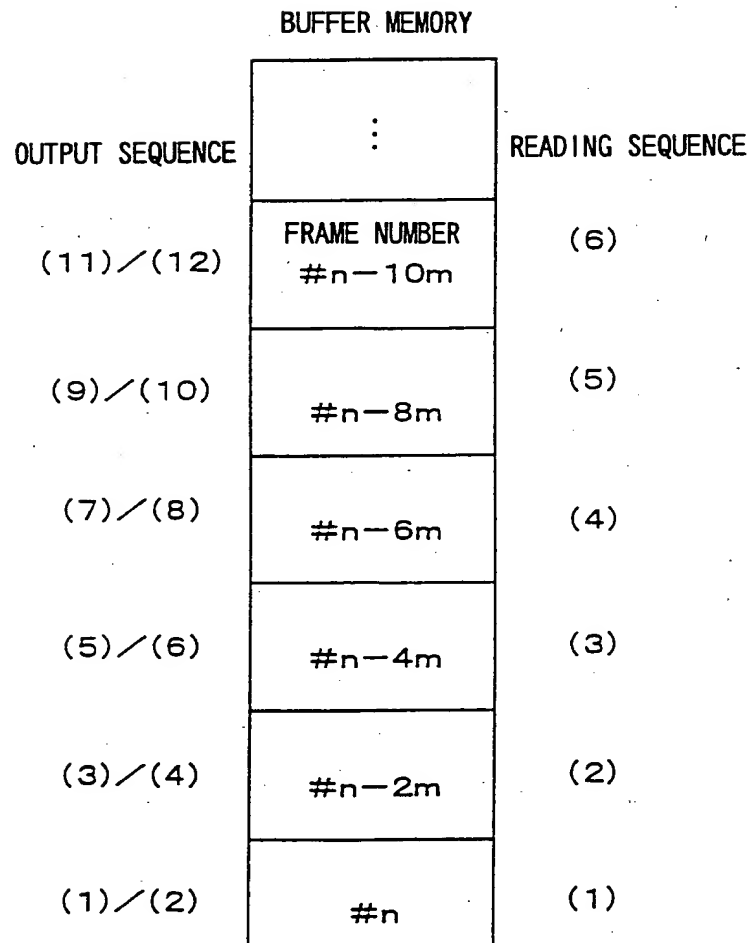


FIG. 41 REVERSE DIRECTION/HIGH-SPEED PLAYBACK



END AUDIOVISUAL FRAME DATA

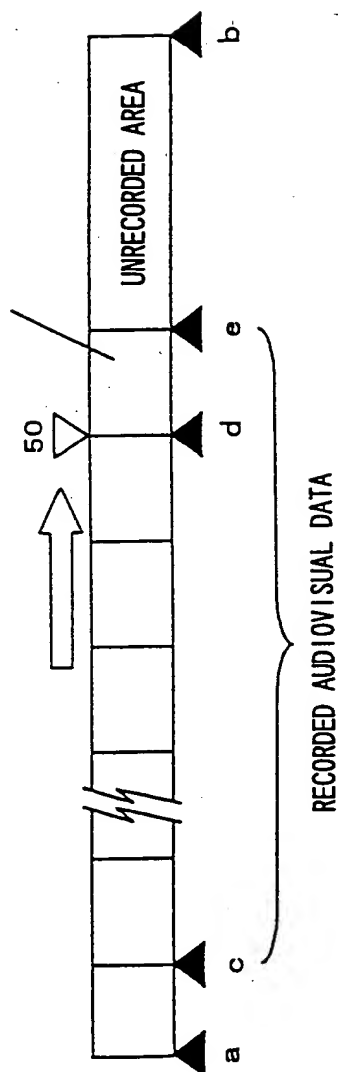


FIG. 43

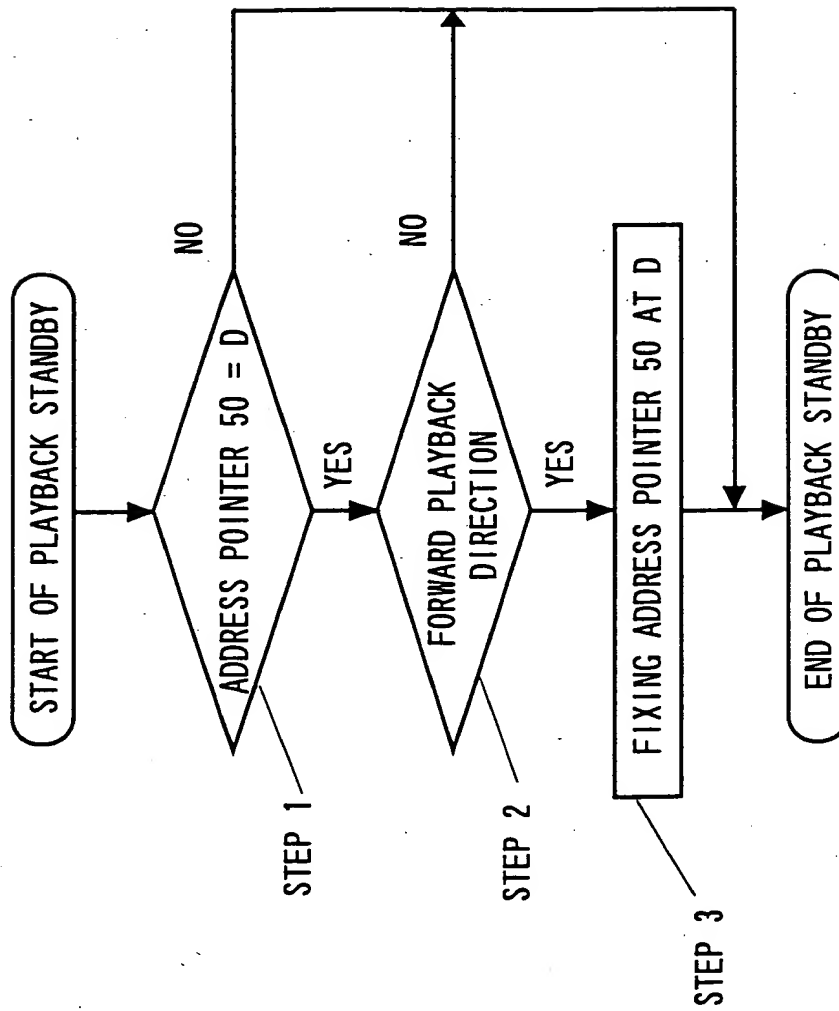
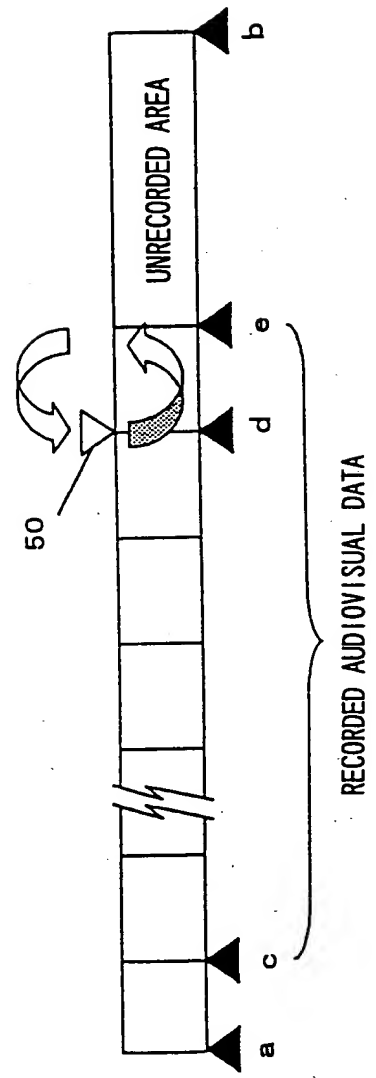


FIG. 44

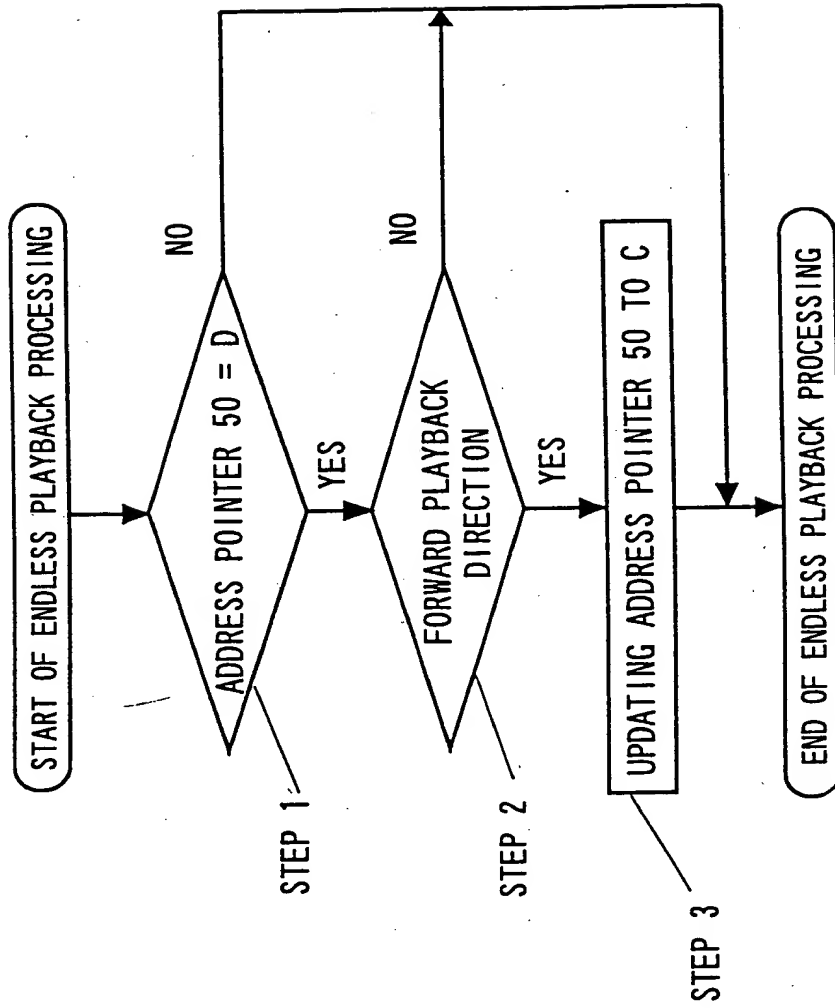




```

graph TD
    Start([START OF ENDLESS PLAYBACK PROCESSING]) --> Step1{ADDRESS POINTER 50 = D}
    Step1 -- NO --> Step2{FORWARD PLAYBACK DIRECTION}
    Step1 -- YES --> Step2
    Step2 -- NO --> Step1
    Step2 -- YES --> Step3[UPDATING ADDRESS POINTER 50 TO C]
    Step3 --> End([END OF ENDLESS PLAYBACK PROCESSING])

```



The diagram illustrates a data tape structure. It consists of a horizontal bar divided into several rectangular segments. The rightmost segment is labeled "UNRECORDED AREA". The leftmost segment is labeled "50" with an arrow pointing to it. A double-headed arrow is positioned above the first segment. A lightning bolt symbol is located between the first and second segments. The segments are labeled with letters: "a" at the bottom left, "c" at the bottom right, "d" at the top right, "e" at the top right, and "b" at the top right. A bracket on the right side groups the segments from "a" to "e" under the label "RECORDED AUDIOVISUAL DATA".

FIG. 48

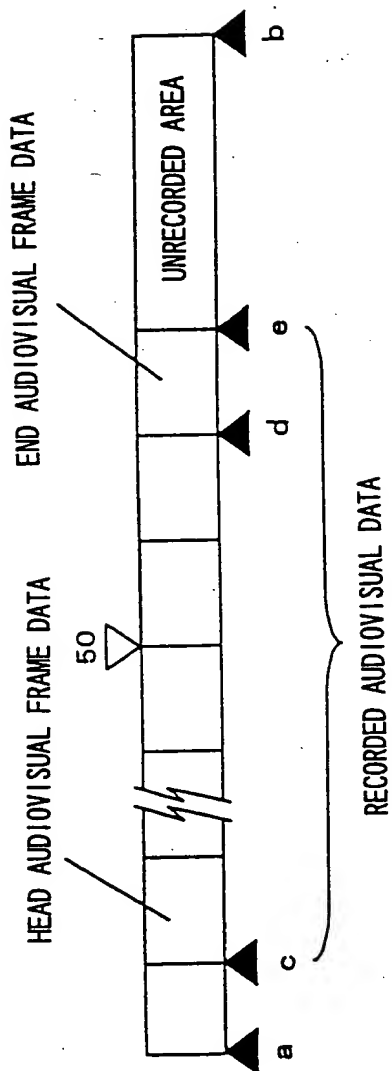


FIG. 49

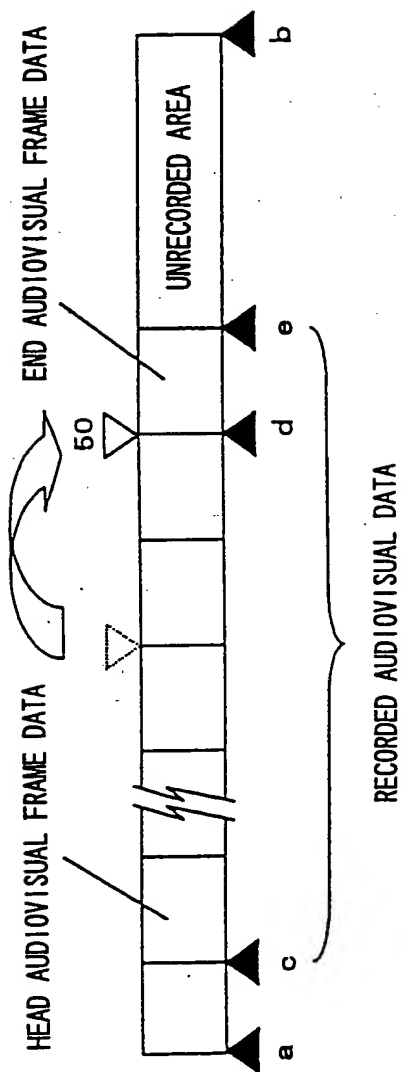


FIG. 50

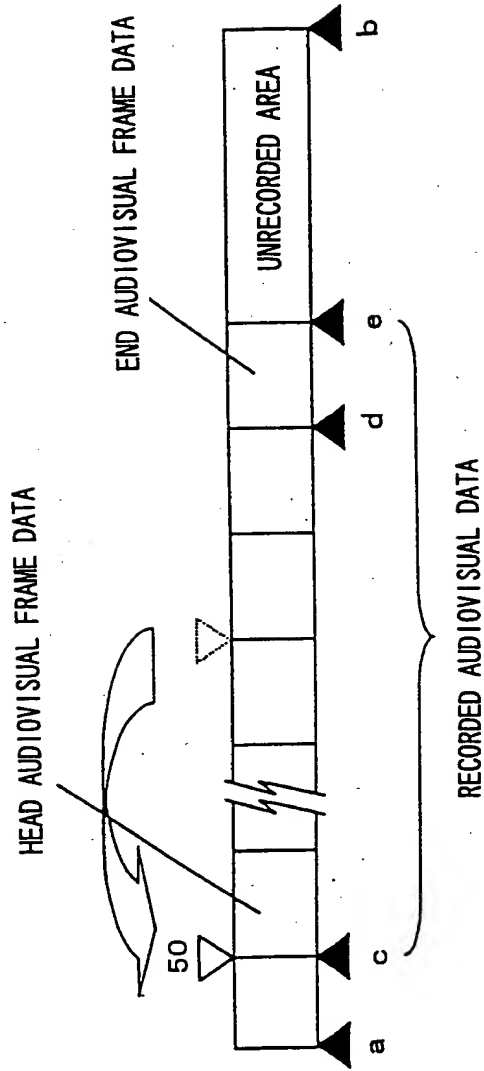


FIG. 51

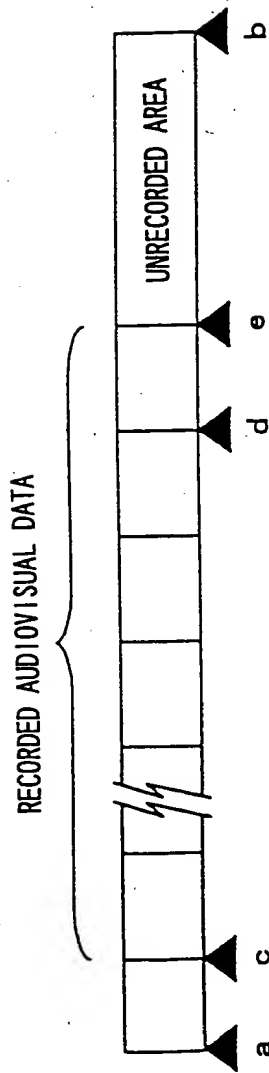


FIG. 52

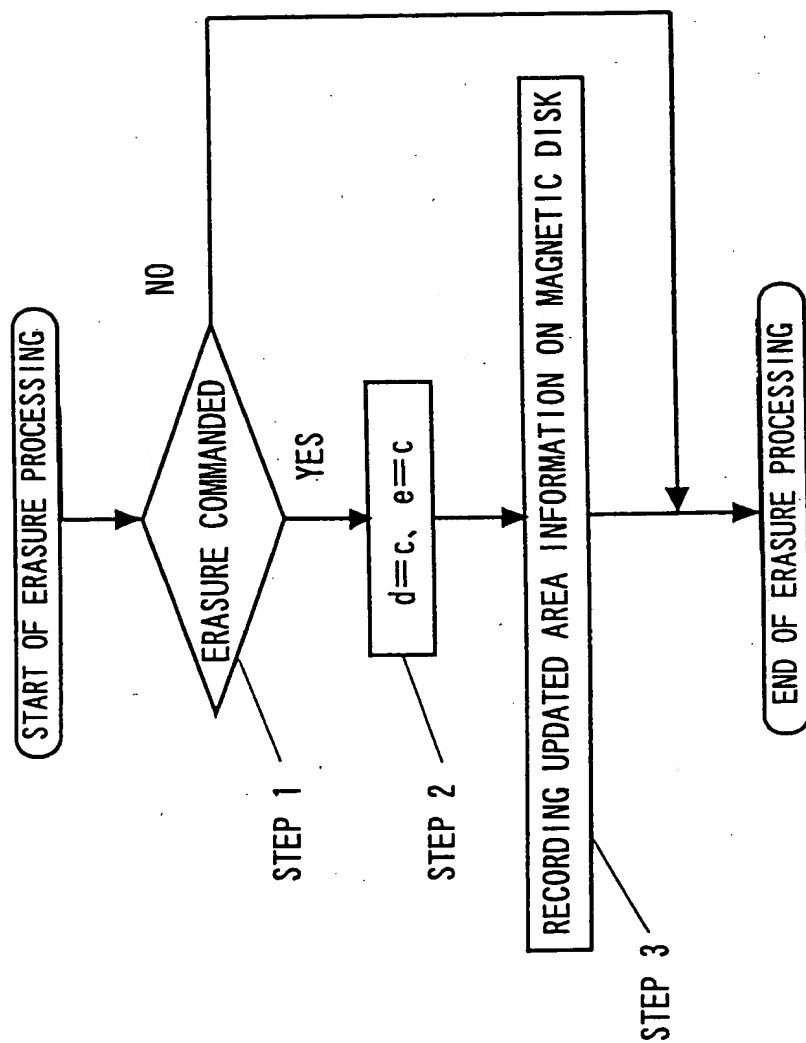
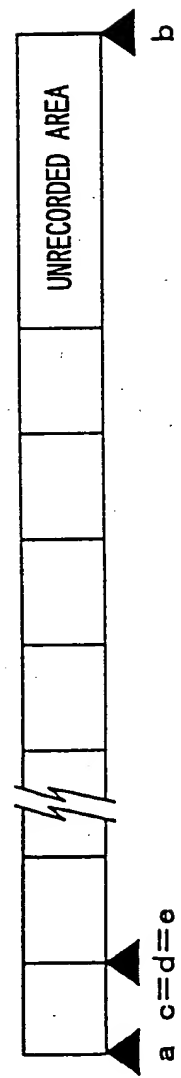


FIG. 53



RECORDED AUDIOVISUAL DATA

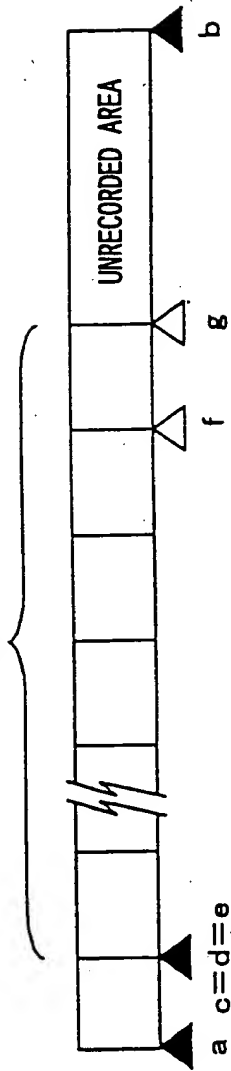


FIG. 55

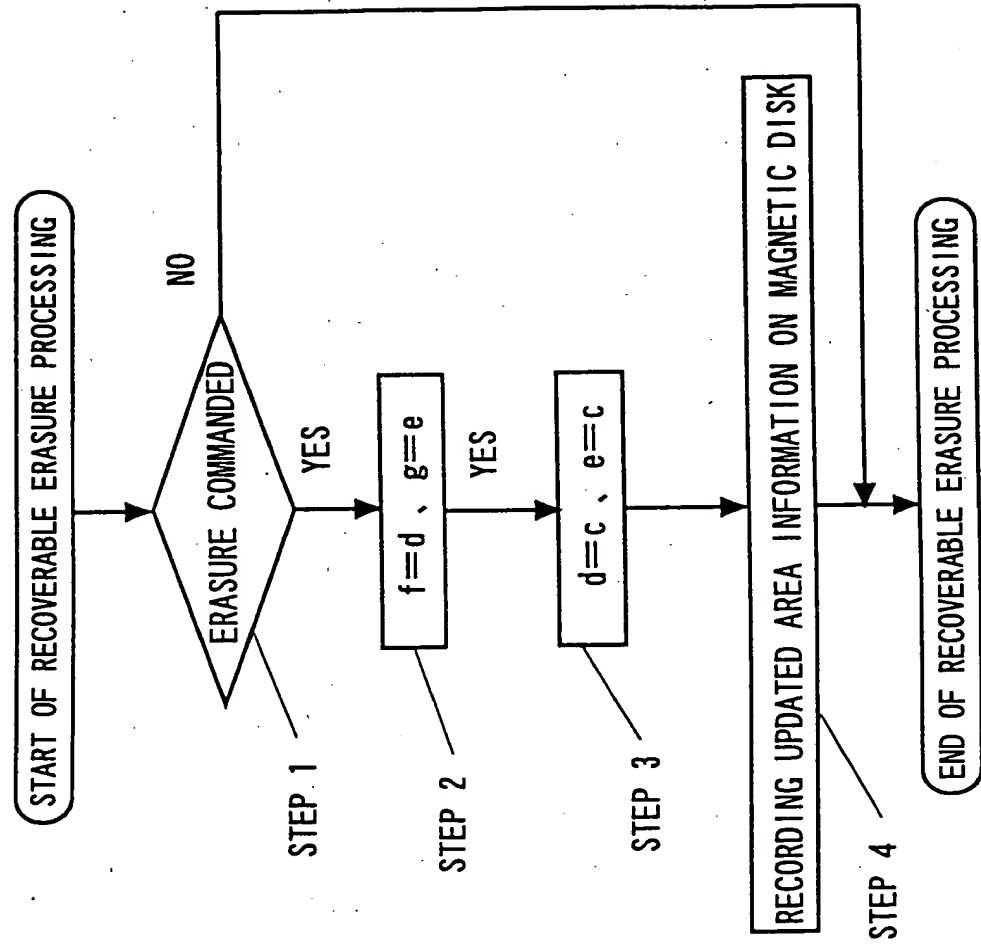
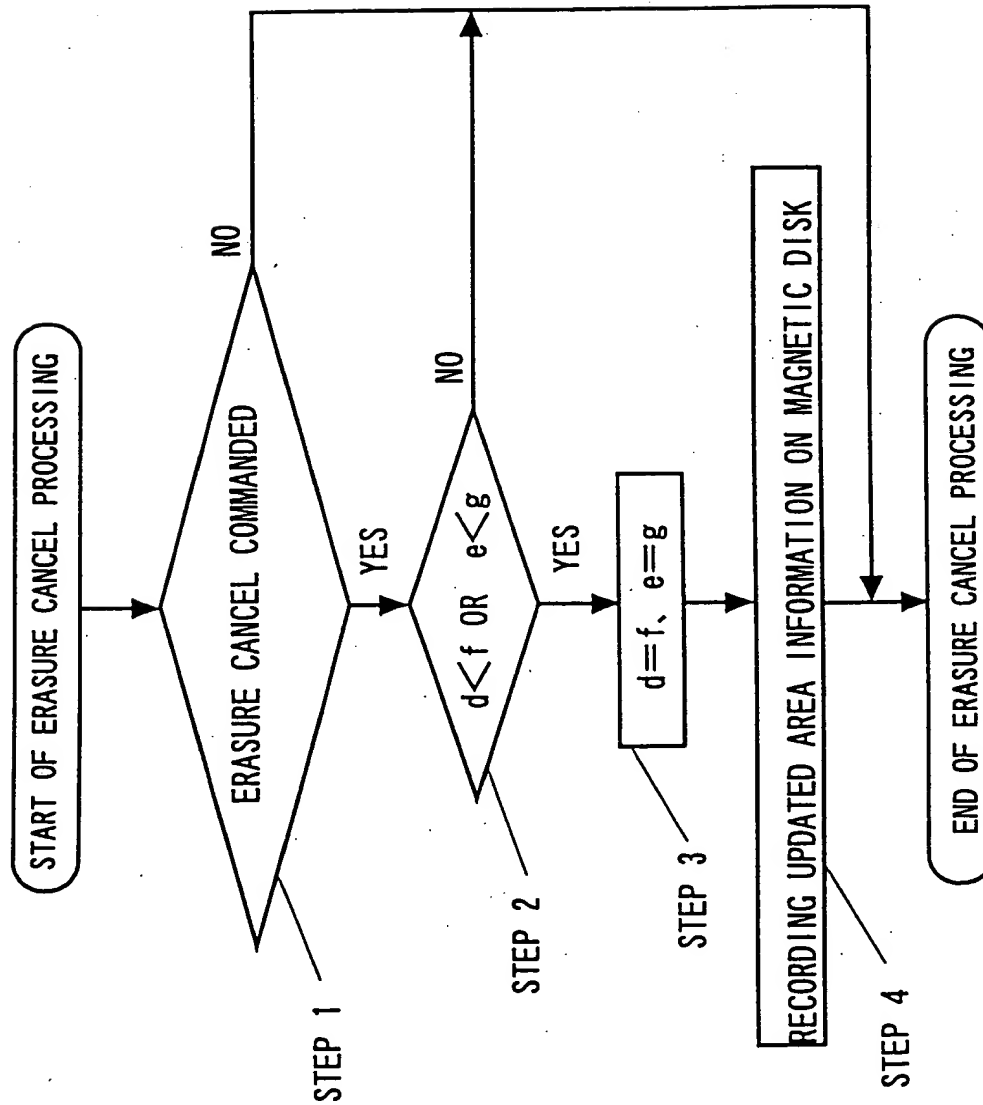


FIG. 56



RECORDED AUDIOVISUAL DATA

UNRECORDED AREA

a c d e b

FIG. 58

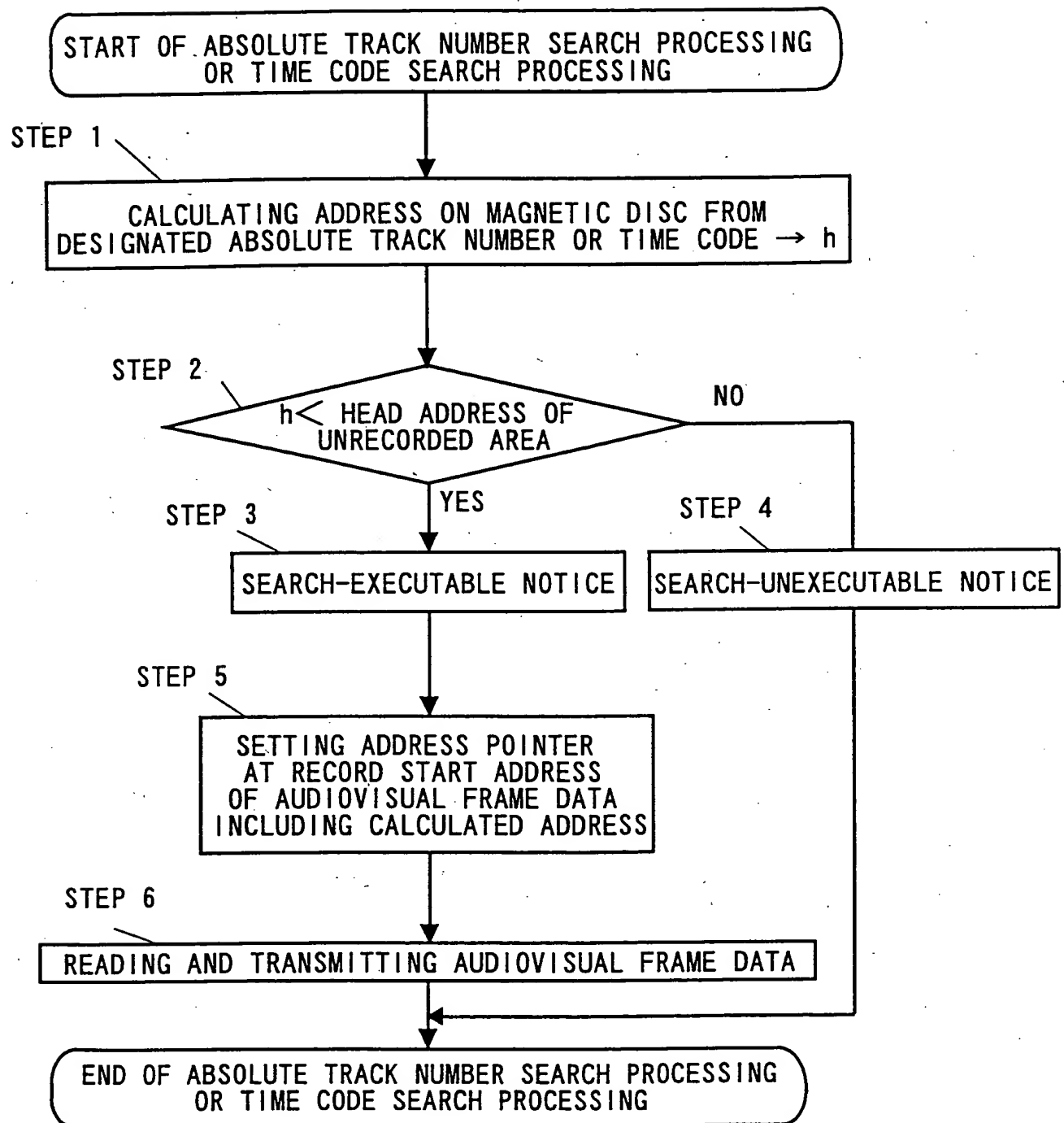


FIG. 60

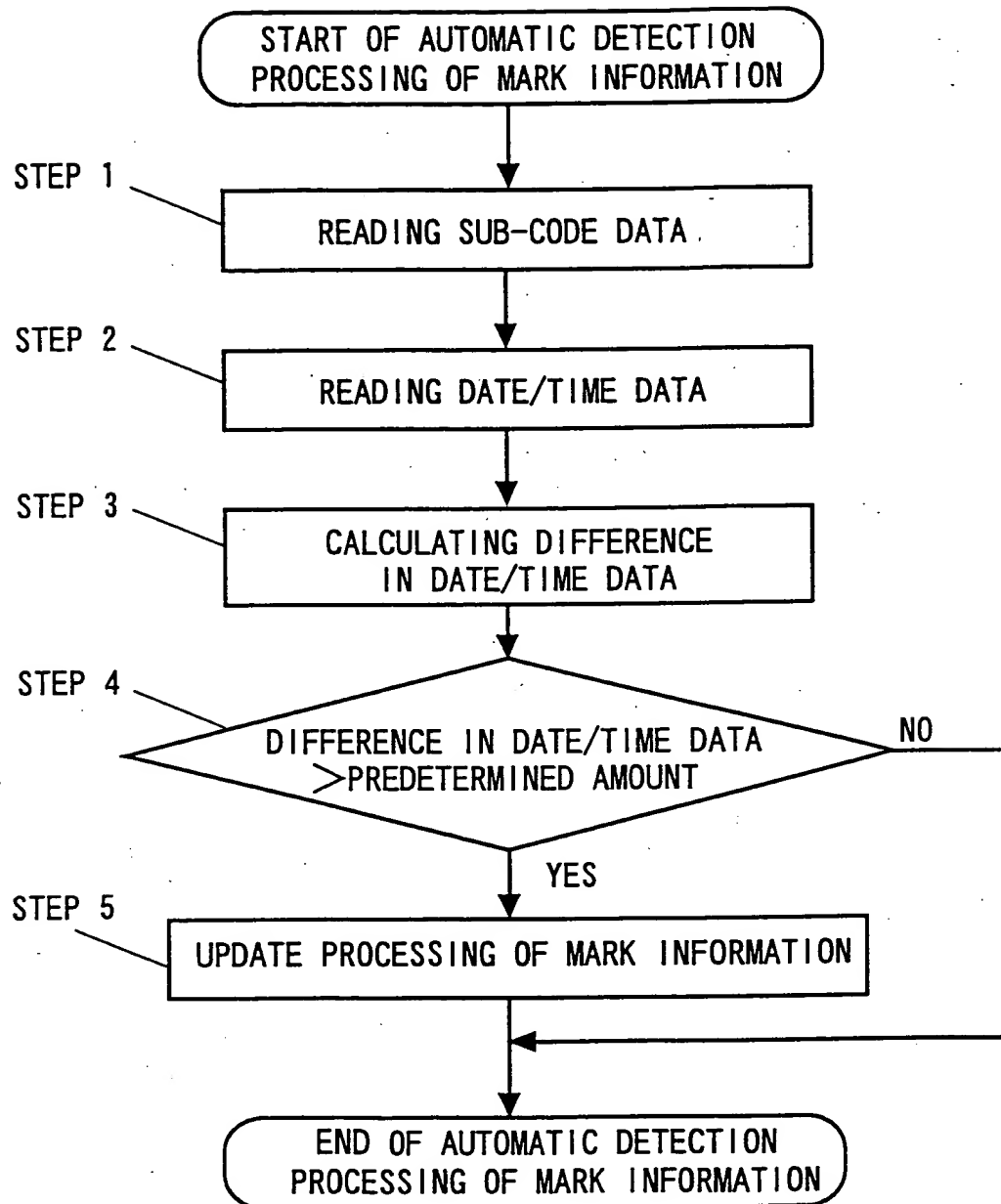
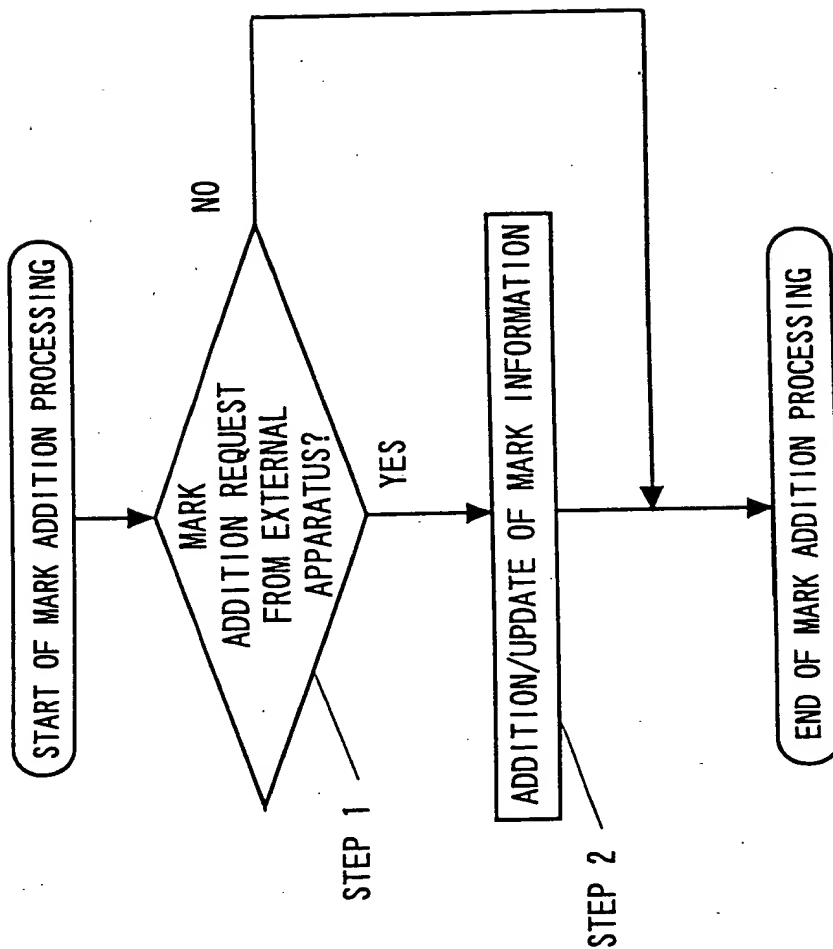


FIG. 61

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD1	TC1	ATN1
AD2	TC2	ATN2
AD3	TC3	ATN3
<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>	<div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>

FIG. 62



GENERATION OF MARK ADDITION COMMAND

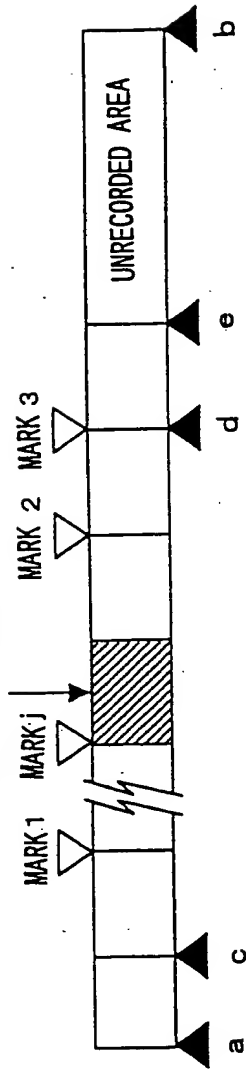


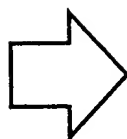
FIG. 64

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD1	TC1	ATN1
AD2	TC2	ATN2
AD3	TC3	ATN3

← MARK INFORMATION AT MARK 1

← MARK INFORMATION AT MARK 2

← MARK INFORMATION AT MARK 3



RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD1	TC1	ATN1
ADj	TCj	ATNj
AD2	TC2	ATN2
AD3	TC3	ATN3

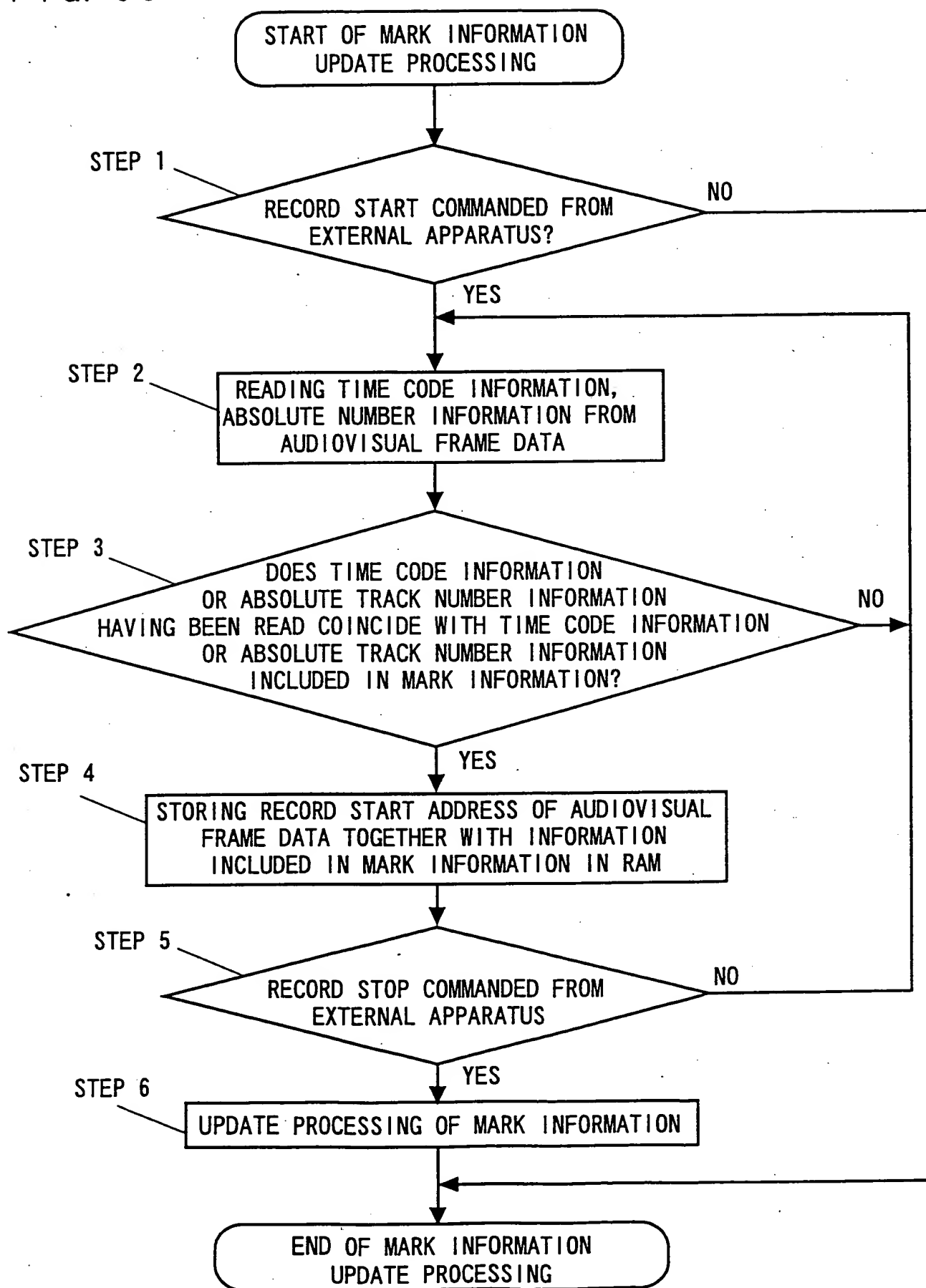
← MARK INFORMATION AT MARK 1

← MARK INFORMATION AT MARK j

← MARK INFORMATION AT MARK 2

← MARK INFORMATION AT MARK 3

FIG. 65



MARK INFORMATION STORED IN MAGNETIC DISK APPARATUS

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD1	TC1	ATN1
AD4	TC4	ATN4
AD6	TC6	ATN6

EXTERNALLY RECEIVED MARK INFORMATION AND RECORD START ADDRESS

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD2	TC2	ATN2
AD3	TC3	ATN3
AD5	TC5	ATN5

UPDATED MARK INFORMATION IN MAGNETIC DISK APPARATUS

RECORD START ADDRESS	TIME CODE	ABSOLUTE TRACK NUMBER
AD1	TC1	ATN1
AD2	TC2	ATN2
AD3	TC3	ATN3
AD5	TC5	ATN5
AD6	TC6	ATN6

FIG. 67

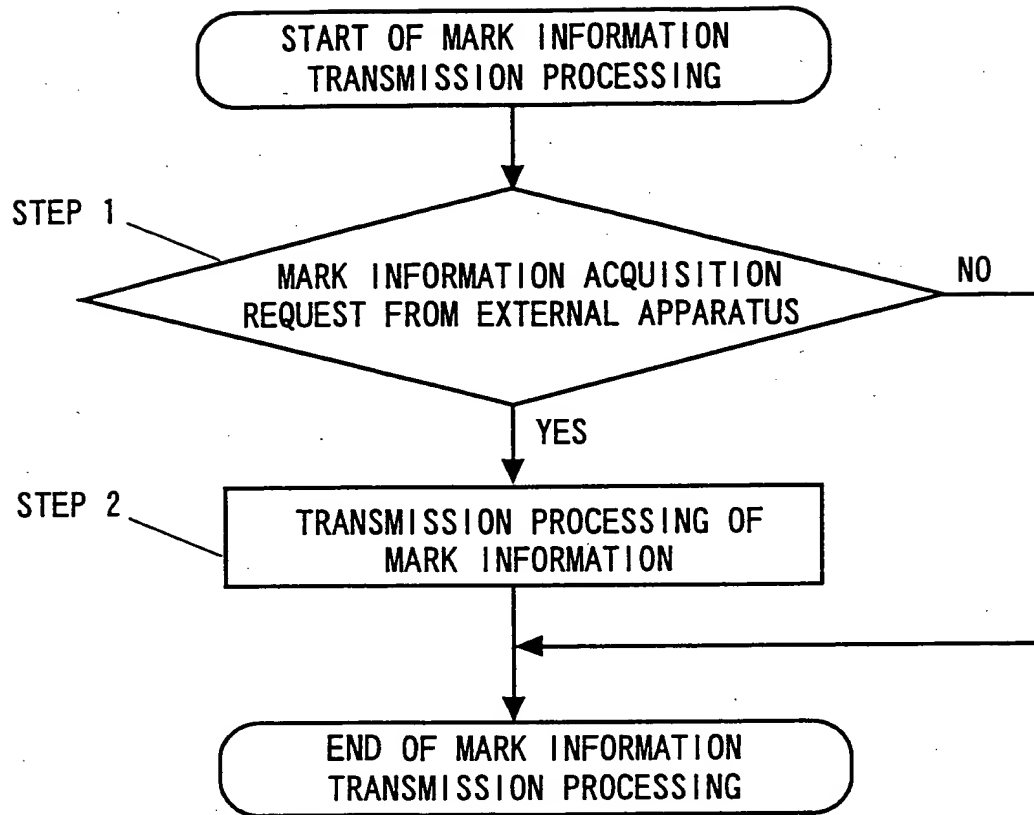


FIG. 68

TRANSMISSION FORMAT OF MARK INFORMATION

N (MARK INFORMATION AMOUNT)
ATN1 (ABSOLUTE TRACK NUMBER)
ATN2 (ABSOLUTE TRACK NUMBER)
ATN3 (ABSOLUTE TRACK NUMBER)
ATN4 (ABSOLUTE TRACK NUMBER)
ATN5 (ABSOLUTE TRACK NUMBER)
<div> <div></div> <div></div> <div></div> <div></div> </div>
ATNN (ABSOLUTE TRACK NUMBER)

FIG. 69

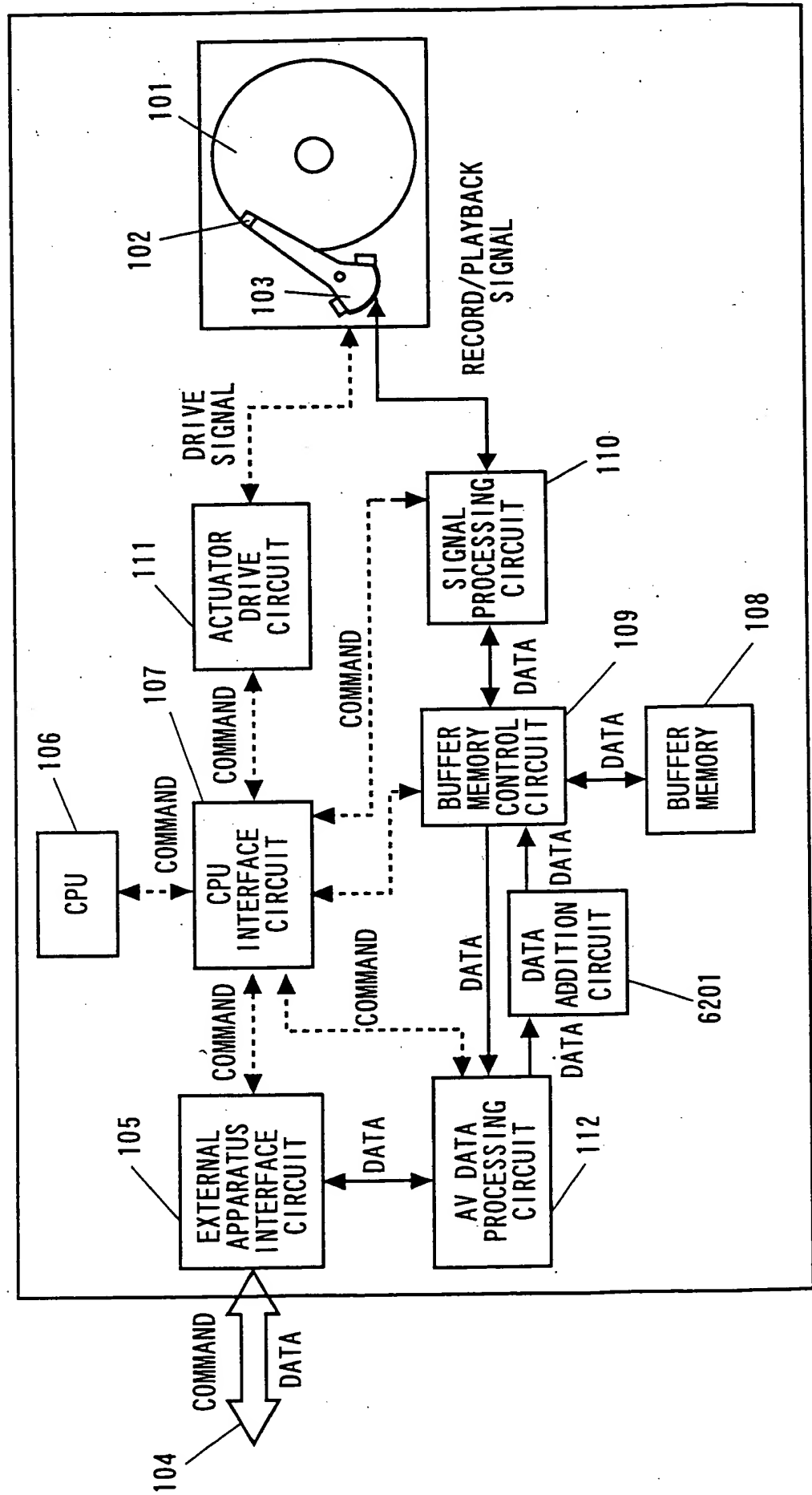


FIG. 70

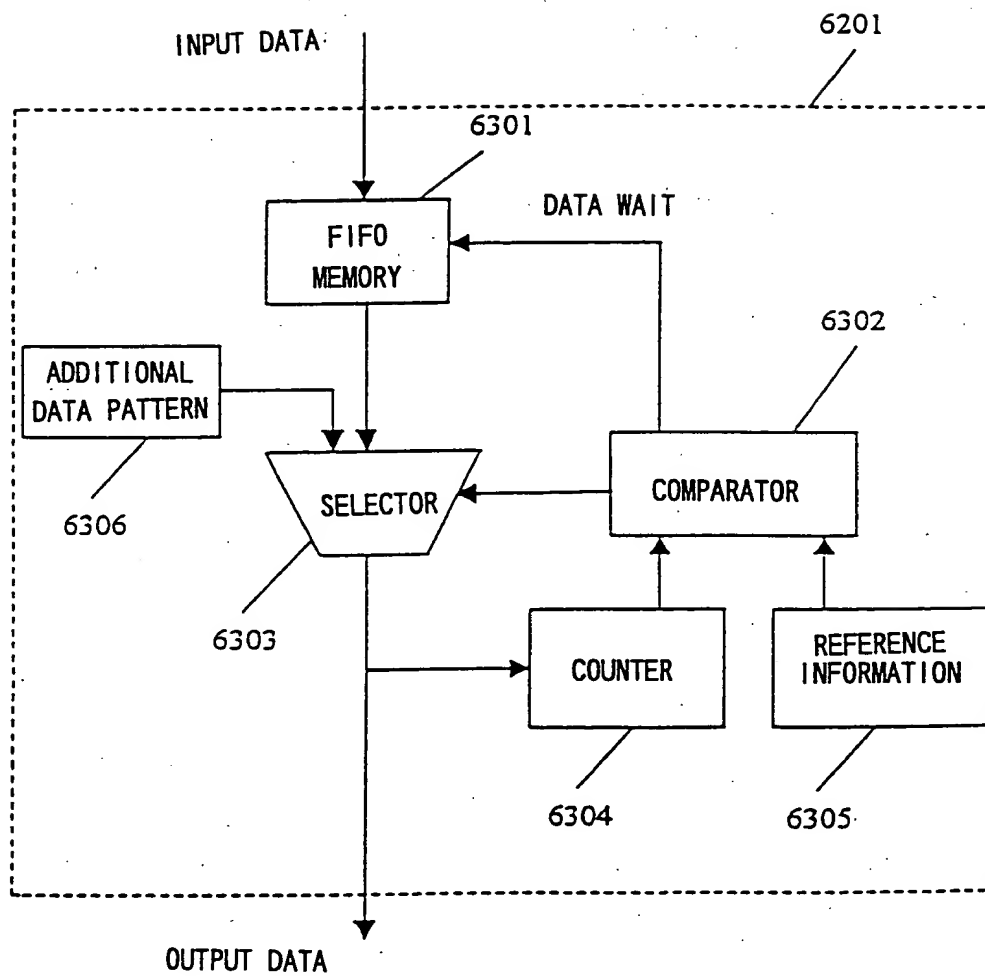


FIG. 71

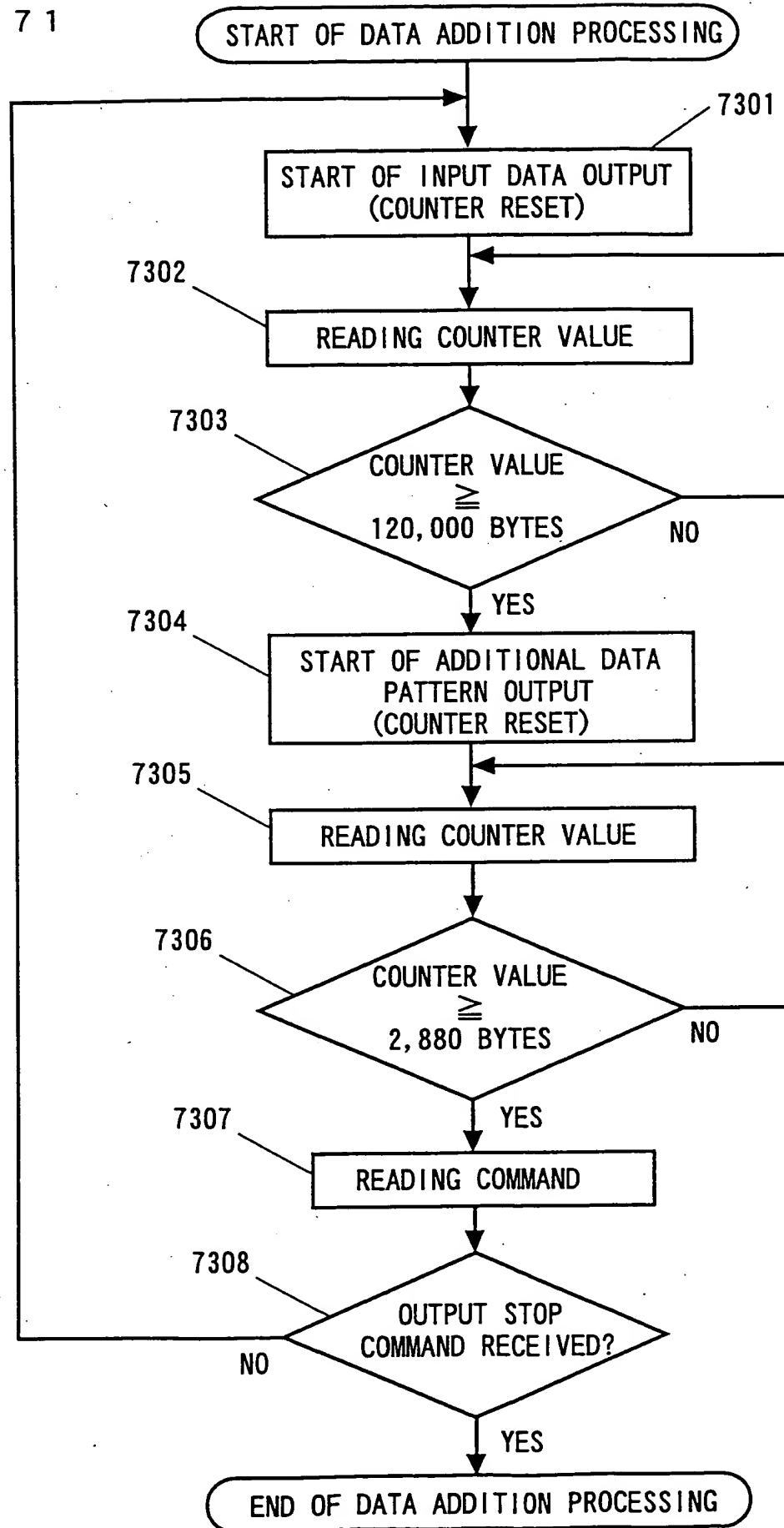
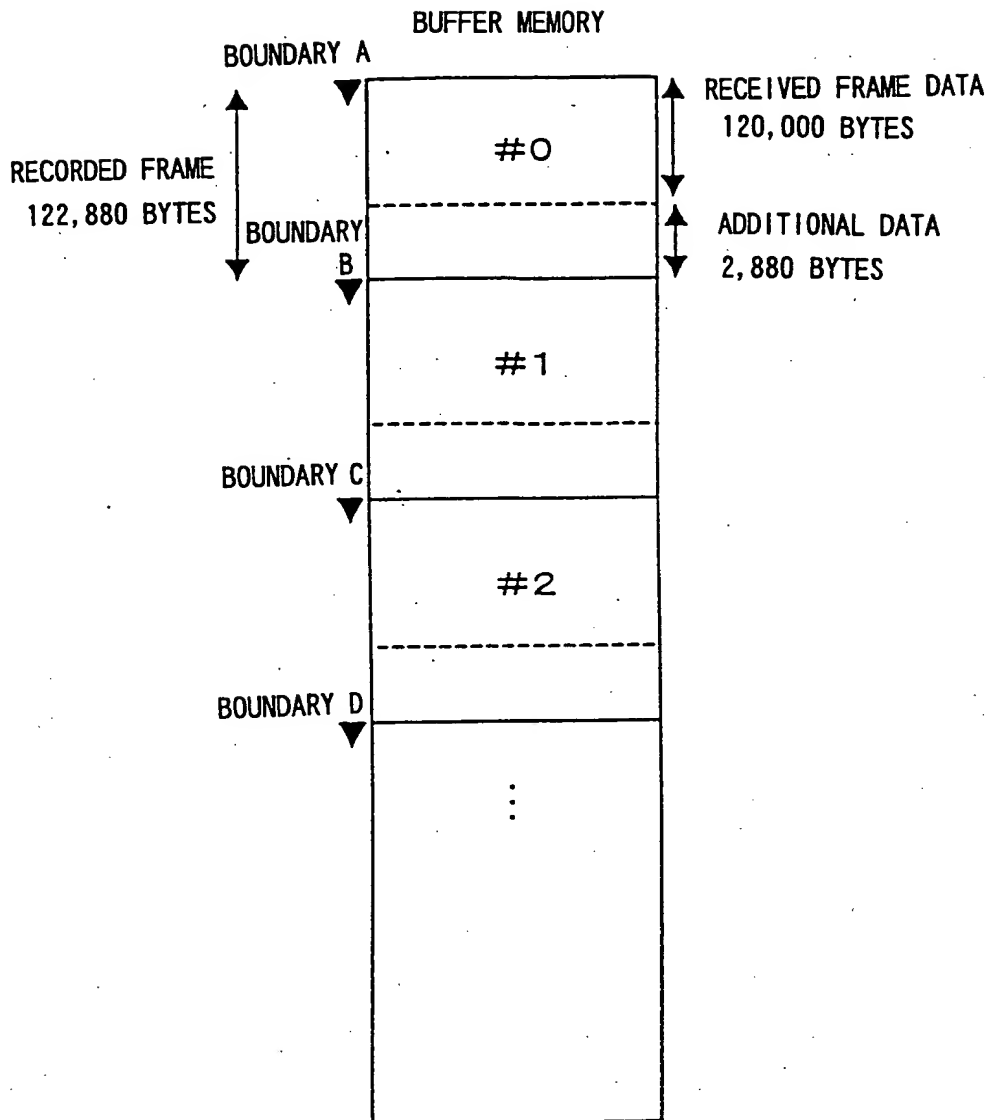


FIG. 72



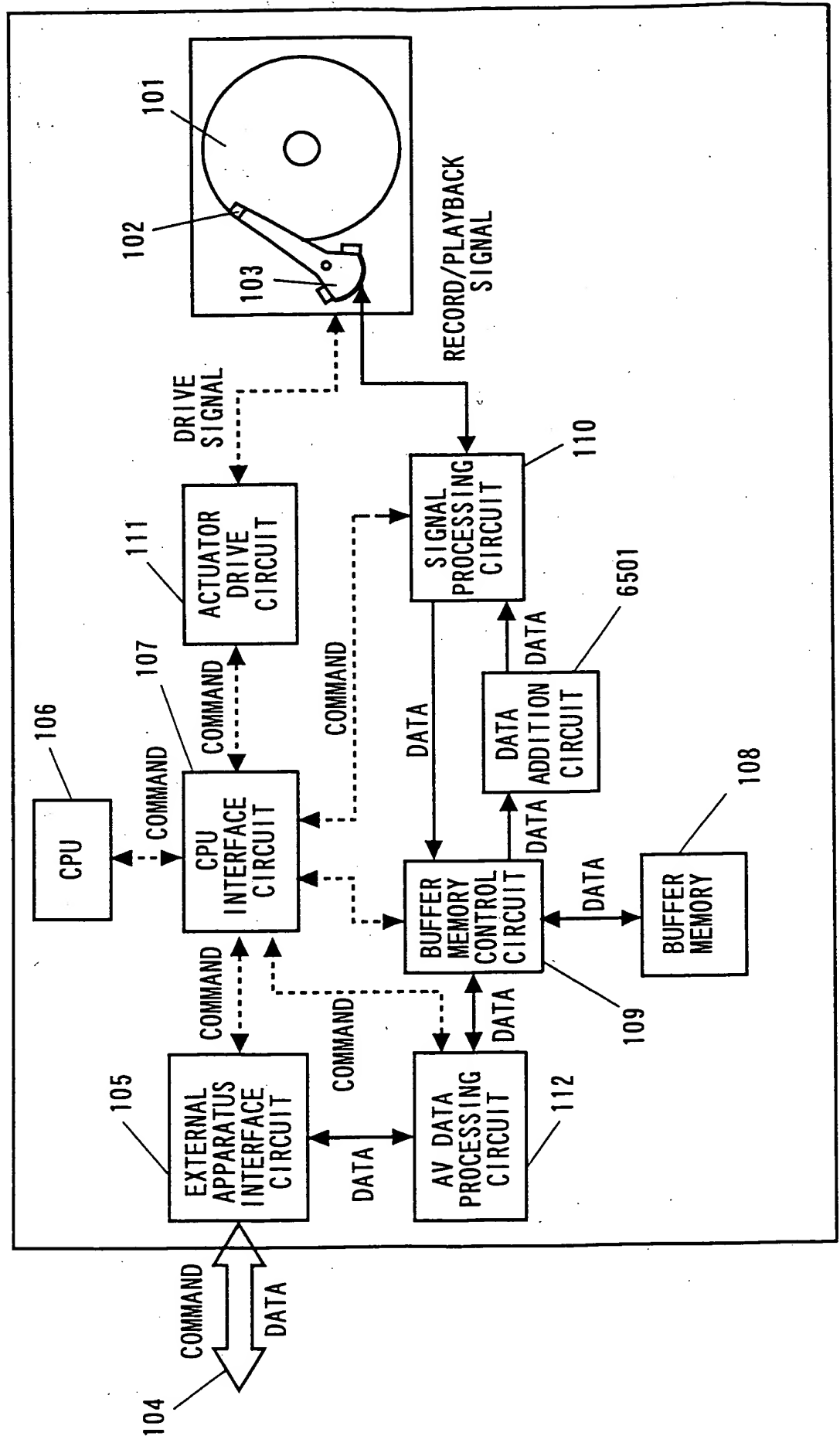


FIG. 73

FIG. 74

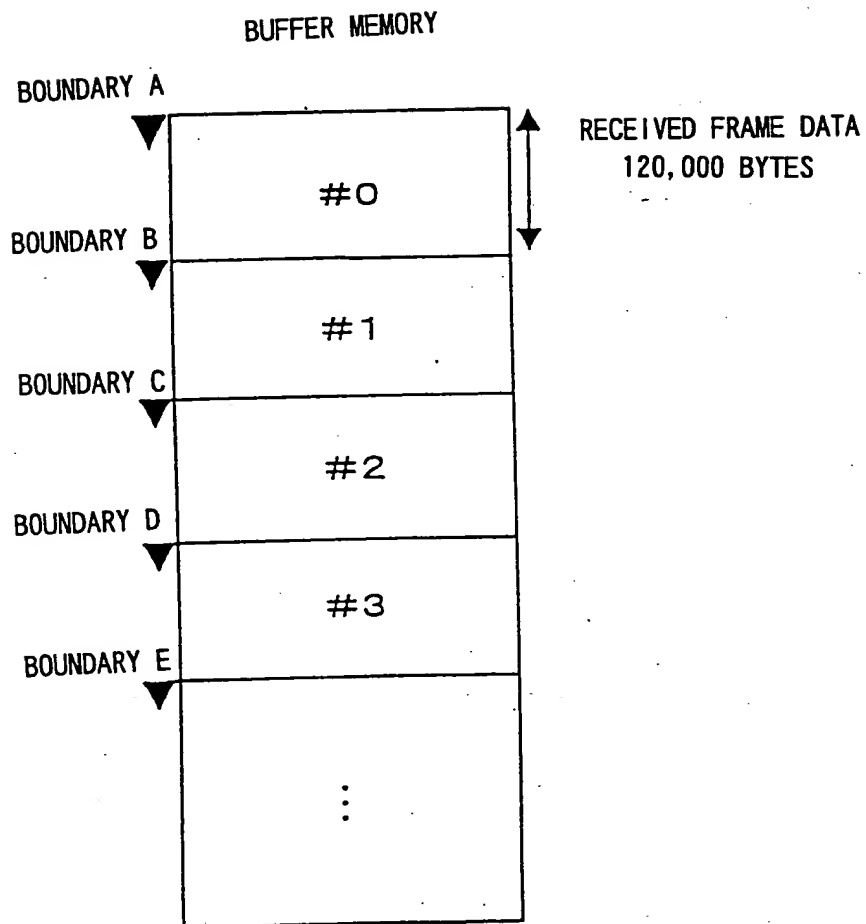


FIG. 75

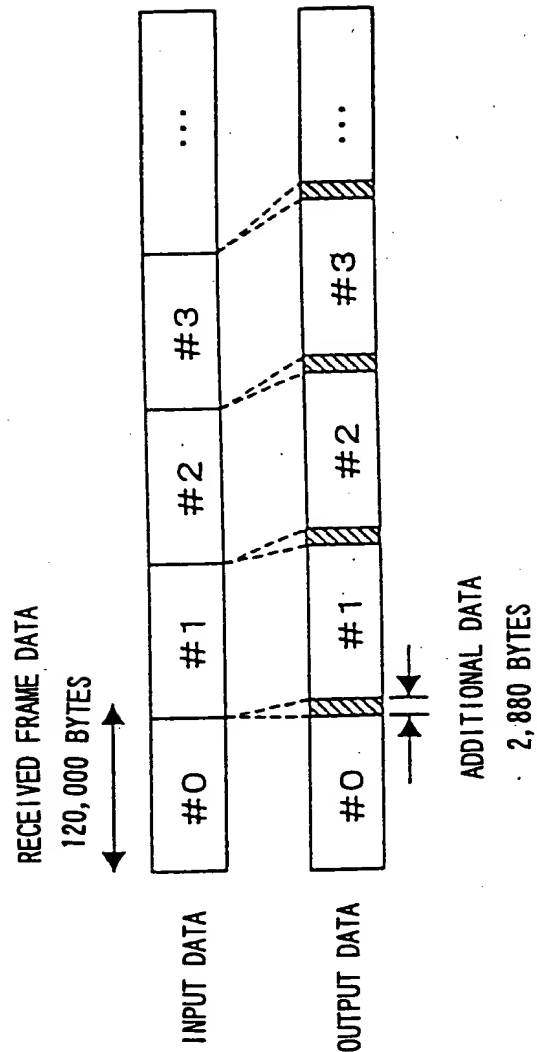


FIG. 76

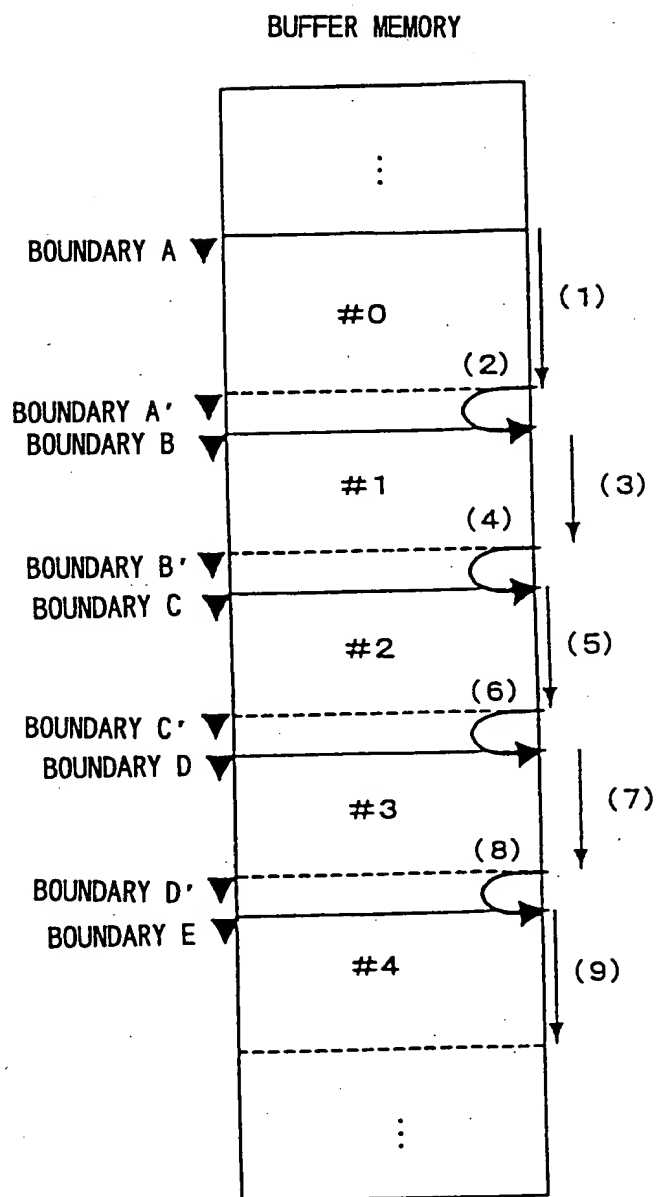


FIG. 77

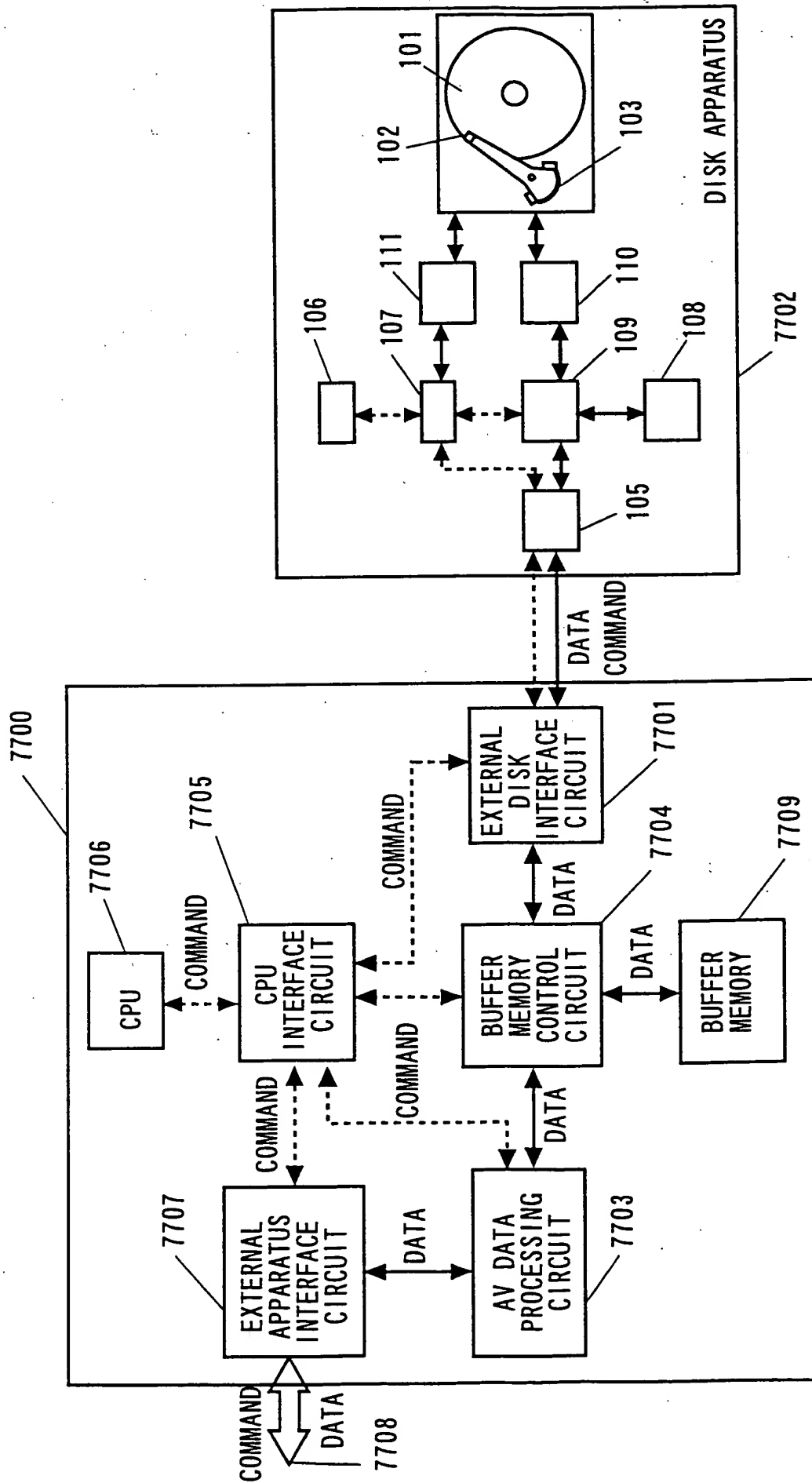


FIG. 78

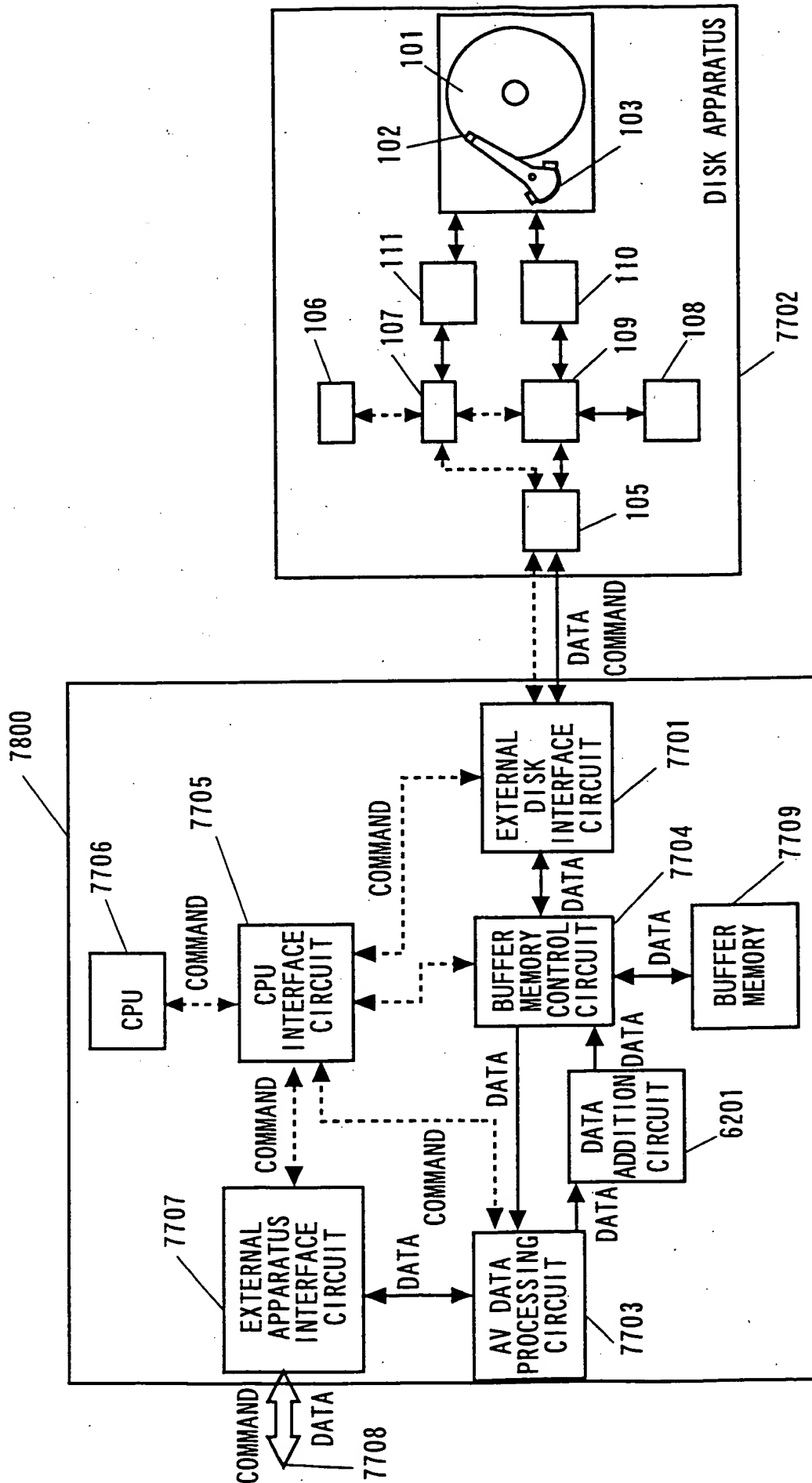


FIG. 79

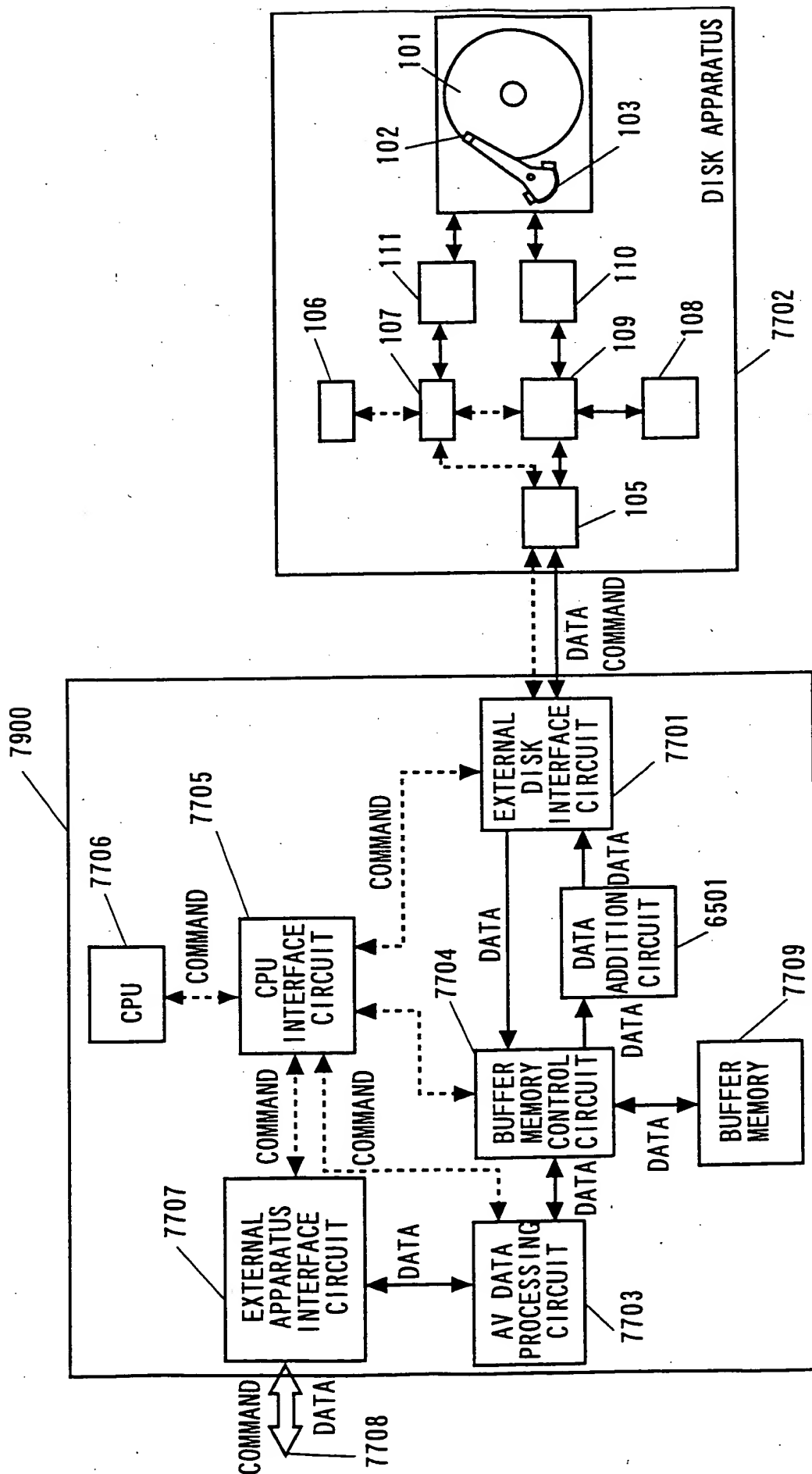


FIG. 80

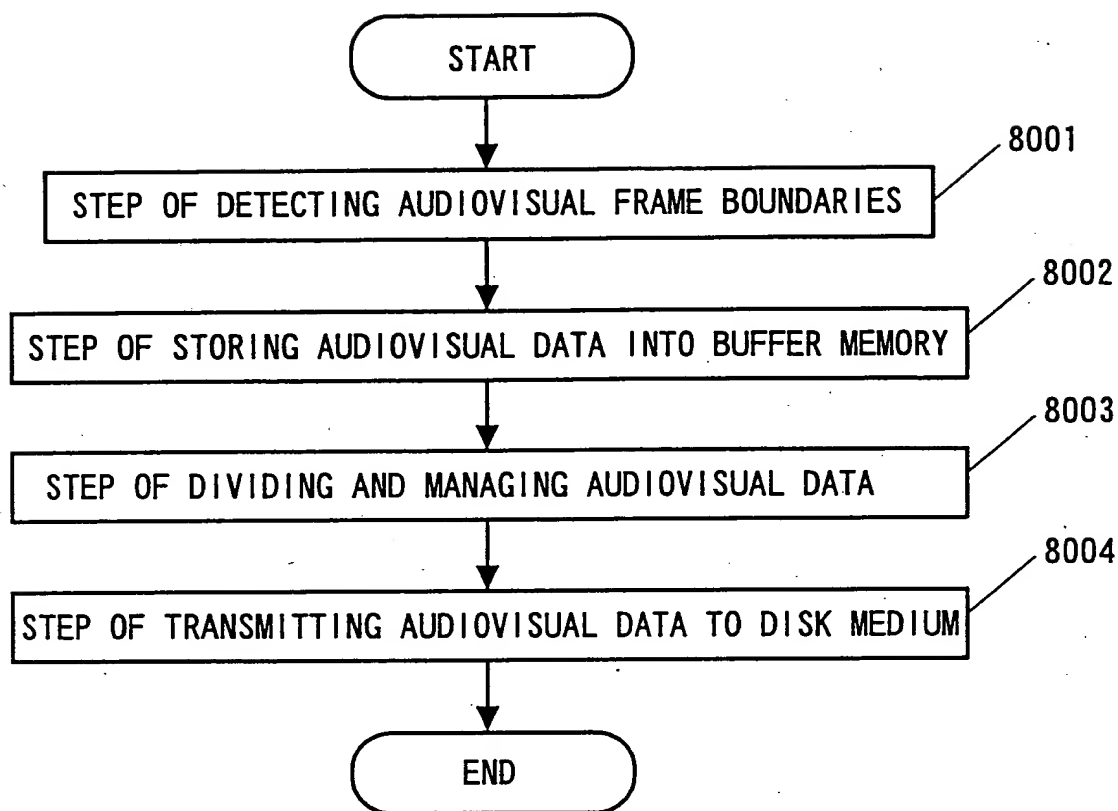


FIG. 81

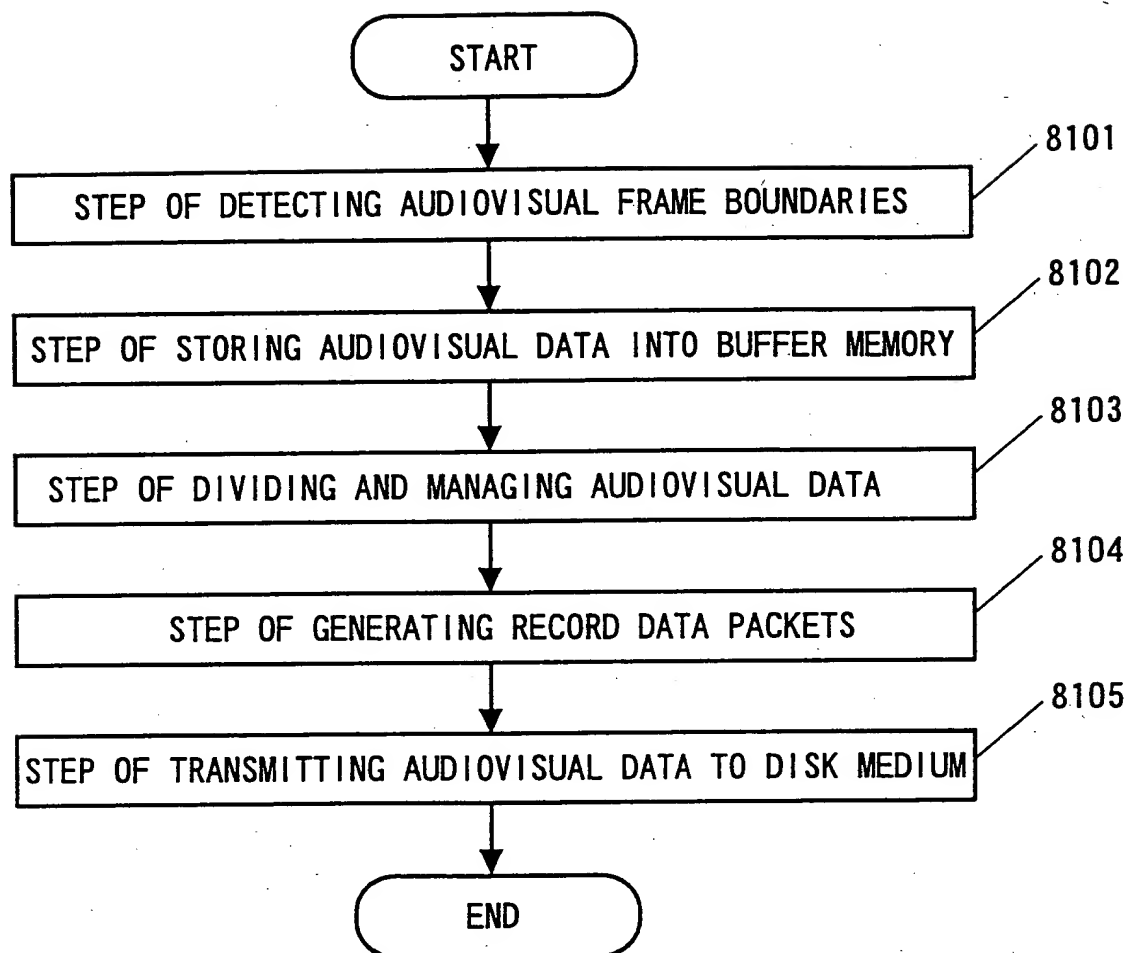


FIG. 82

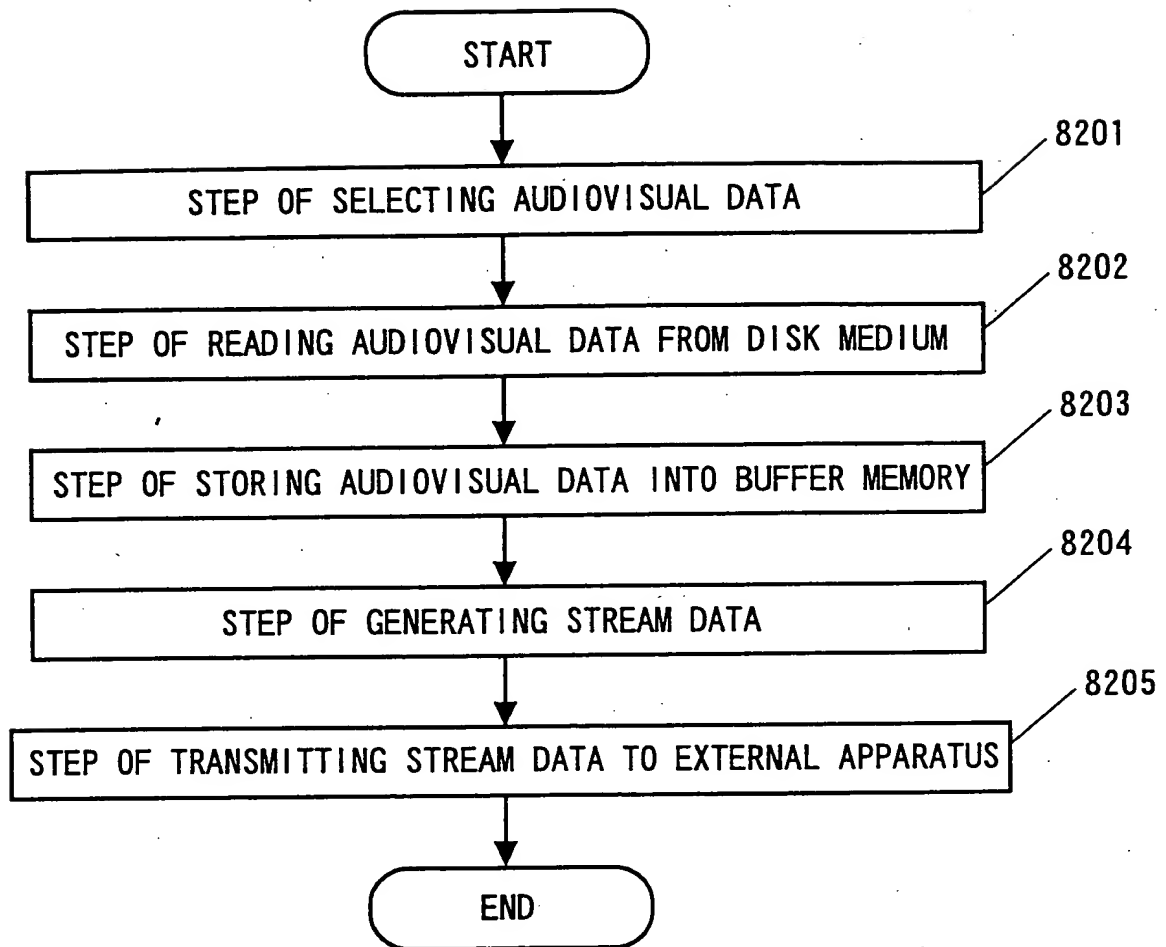


FIG. 83

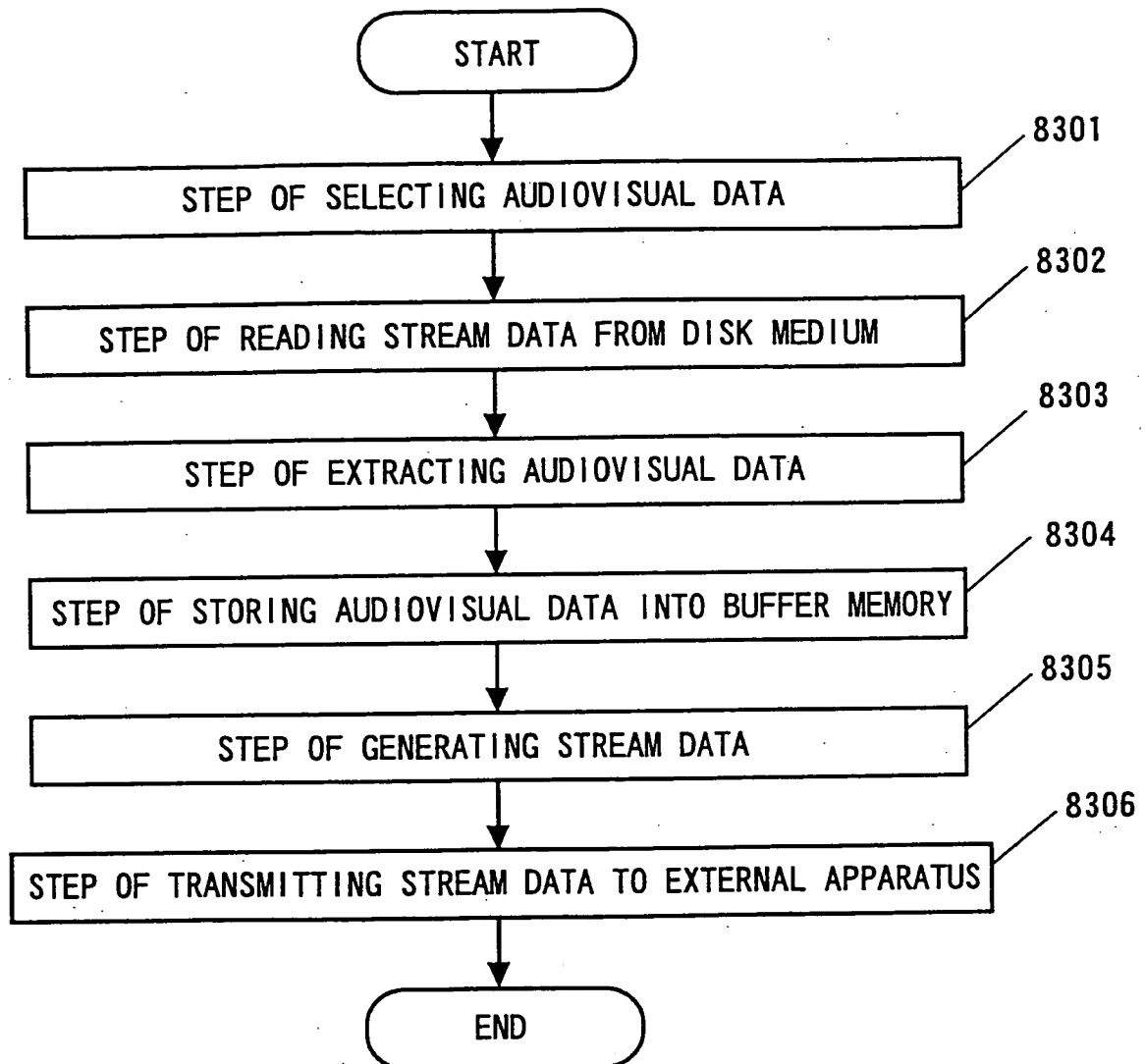


FIG. 84

